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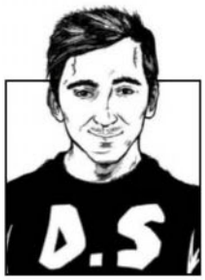
THE RETROBATES
FAVOURITE METROID GAME

DARRAN JONES
I'm going for *Metroid Prime*. It's an astonishing adventure game and one of the best 2D-to-3D transformations that I've ever seen.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine
Currently playing:
Eagle Flight
Favourite game of all time:
Eagle Flight

NICK THORPE
My first experience with the series was *Metroid Fusion*, and that's where my fondest memories lie.
Expertise:
Owning five Master Systems (I sold two)
Currently playing:
Persona 4 Golden
Favourite game of all time:
Sonic The Hedgehog

LUKE ALBIGÉS
Super Metroid for me, although *Prime*'s transition to full-3D was also sensational.
Expertise:
Carrying Drew through *Destiny* Raids
Currently playing:
World Of Final Fantasy
Favourite game of all time:
Micro Machines 2: Turbo Tournament



DREW SLEEP
Let it be known that anyone who doesn't say *Metroid Prime* is the best is officially dead to me, and I will hunt them down with a Plasma Beam and Super Missiles.
Expertise:
A lack of mercy
Currently playing:
Monster Hunter Generations
Favourite game of all time:
Rocket Knight Adventures

SAM RIBBITS
As my first encounter with Samus, it has to be *Metroid Fusion* for me. (Don't tell Drew).
Expertise:
Pixels
Currently playing:
Croc: Legend of the Gobbos
Favourite game of all time:
Pokémon Yellow

PAUL DRURY
Super Metroid was my first meeting with Samus and she left an impression... though mainly because it reminded me of *Turrican*.
Expertise:
VIC interrupts
Currently playing:
PlayStation VR stuff
Favourite game of all time:
Sheep In Space

JASON KELK
I'd have to say that I still like Samus Aran's original outing on the NES most.
Expertise:
Being a homebrew hero
Currently playing:
Gun Wings
Favourite game of all time:
Io

GRAEME MASON
Not a huge fan, but I did enjoy *Metroid Prime* on the GameCube.
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
Resident Evil Origins
Favourite game of all time:
Resident Evil 4

LOADING...

Let's go, Mr Driver!" Those words, effortlessly transport me back to my youth. I pretty much lived in arcades growing up, and most of my best memories have been from them. It was in an arcade where I first came into contact with my first LaserDisc game, and it was in the arcades that I fell in love with Sega and the shoot-'em-up genre, and it was in the arcades where I first heard the words that heralded the debut of Taito's *Chase HQ*.

I used to love watching shows like *C.H.I.P.S.*, *Starsky & Hutch*, *The Sweeny* and *The Professionals*, and playing *Chase HQ* was my opportunity to relive those exciting car chases that I used to watch as a youngster. *Out Run* had always been my first love in the arcades when it came to racers, but US Gold had let me down with its Amstrad port. Ramming bad guys off the road in Taito's game made me forget about all that, at least until *Amstrad Action* said that Ocean Software would be releasing the Amstrad port.

I was cautious. After all, I'd been burned before. I shouldn't have worried, though, the Amstrad port of *Chase HQ* was magnificent and it's a pleasure to have interviewed one of the men responsible for that cracking adaptation. I wonder how I'll feel if I ever track down the coder behind that Out Run port…

Enjoy the magazine!

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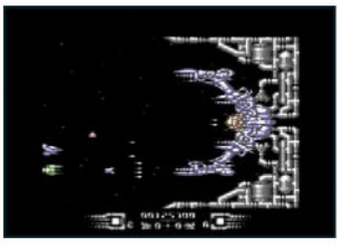

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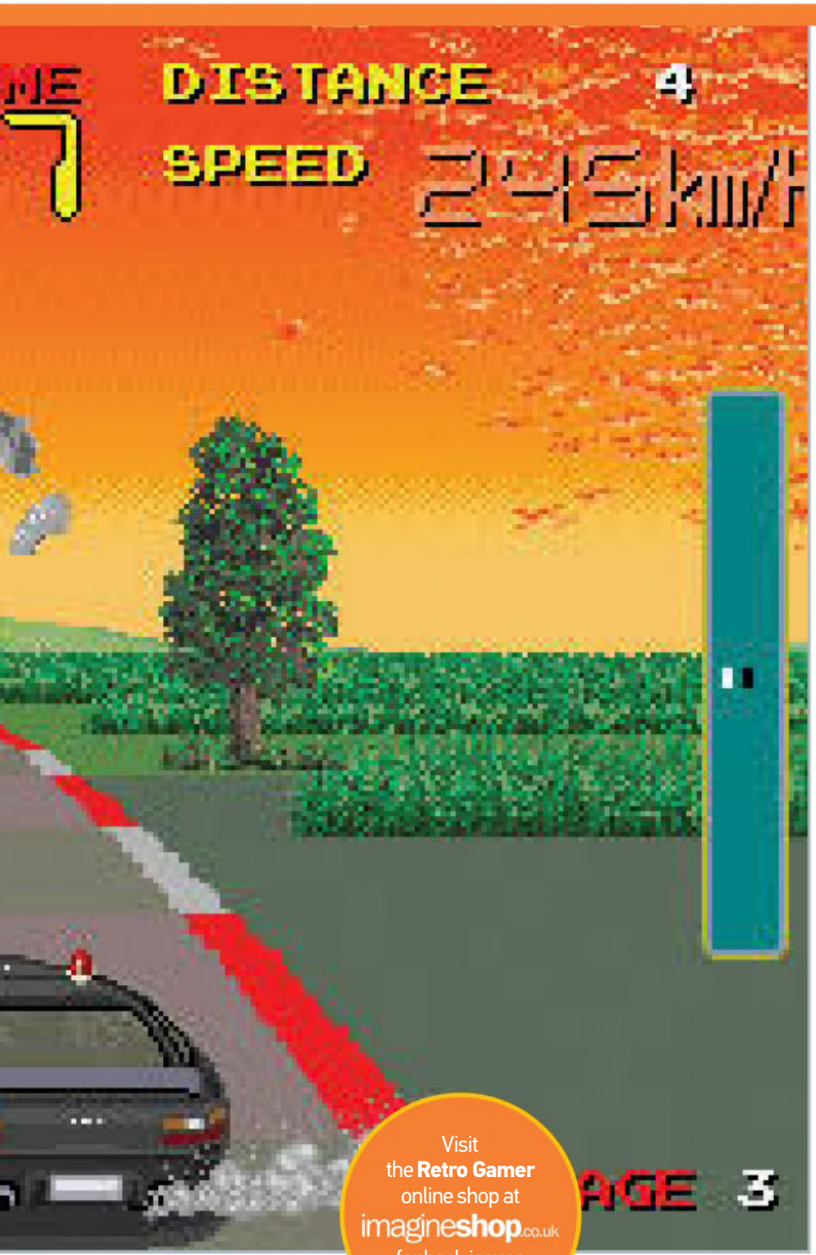

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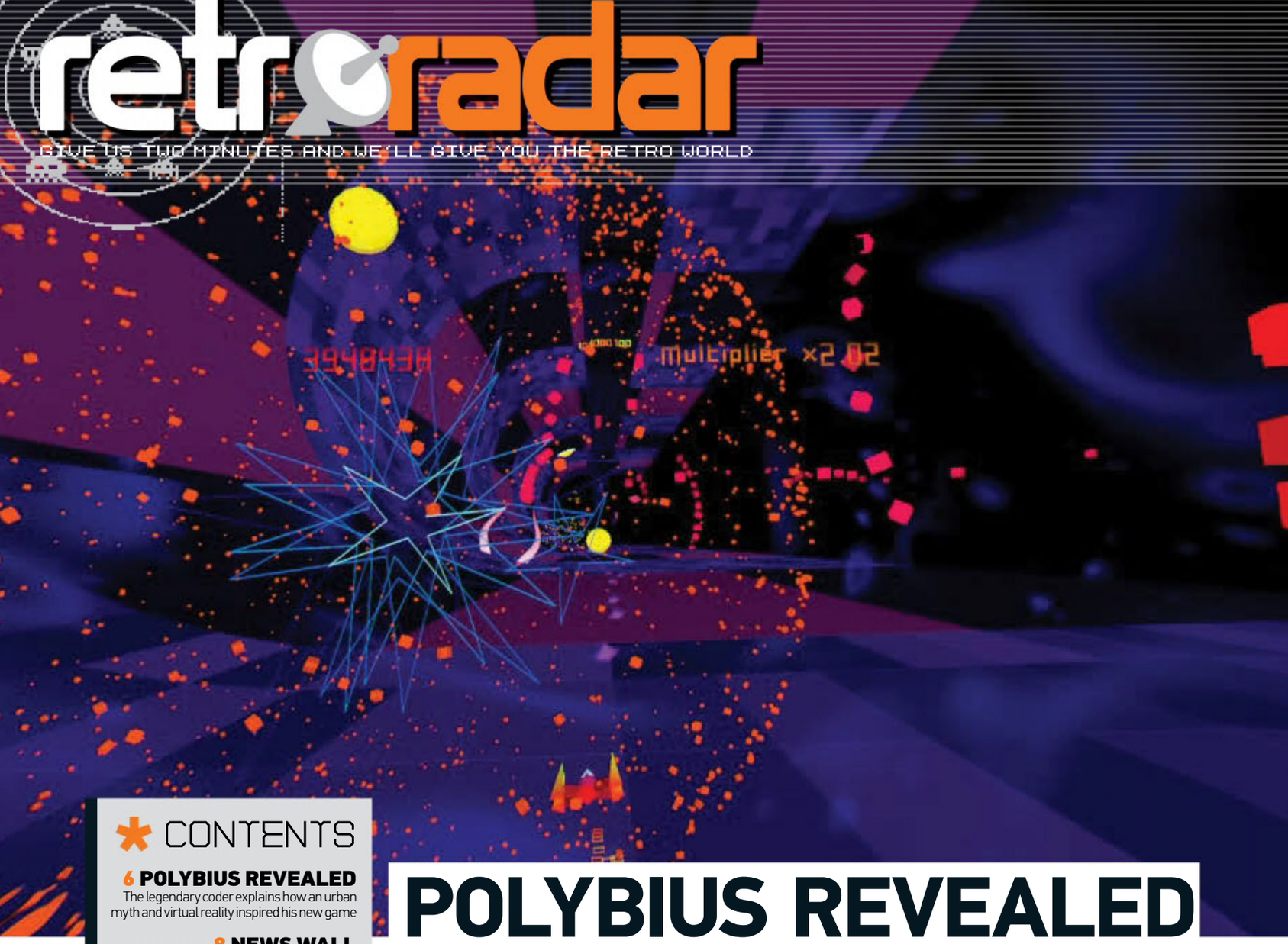

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Our latest collector is going after a complete PAL Mega Drive collection. Wish her luck!

POLYBIUS REVEALED

Jeff Minter brings the legendary arcade game to life

If you've ever heard any videogame urban legends, there's a good chance that you've heard of a game called *Polybius*. The story goes that the game arrived in Portland, Oregon in 1981, with no fanfare and from an unknown company by the name of Sinneslöschen. The game quickly grew popular, but was said to have caused players to experience a variety of psychological aftereffects including amnesia, insomnia and night terrors. Men in black would come to collect data from the machines, which disappeared without a trace after about a month.

Of course, there's no evidence that this game ever actually existed – but Jeff Minter has decided to change all that, bringing the urban legend to life in the form of a virtual reality game for PlayStation 4. Following an exhibition at the Play Expo in Manchester, we were able to chat to the veteran coder about how Llamasoft intends to bridge the gap between fiction and reality.

Where did the inspiration for *Polybius* come from?
There's been this whole urban legend going on about a psychoactive, possibly *Tempest*-like hypnotic arcade game going on for years and I've been interested in making trancy, abstract games for a long time myself so I thought it'd be fun to come up with my own imagining of what that game could be like. In terms of inspirations for the actual gameplay I'd say *Blaster*, [Eugene] Jarvis' lesser known sequel to *Robotron*, but also veering towards the likes of *S.T.U.N. Runner* and even *F-Zero* a little bit. It kind of straddles shoot-'em-up and future-racer categories.

You've worked on Konix Multisystem, Jaguar, Nuon, Vita and PlayStation VR now, what appeals to you about niche systems?
I just like working on prototype/leading-

READERS REACT

We asked the community to tell us what they thought of Minter's latest…

I queued for over an hour for *Polybius*, I felt I should have queued longer, it was *so* worth the wait.
Mark Hellewell

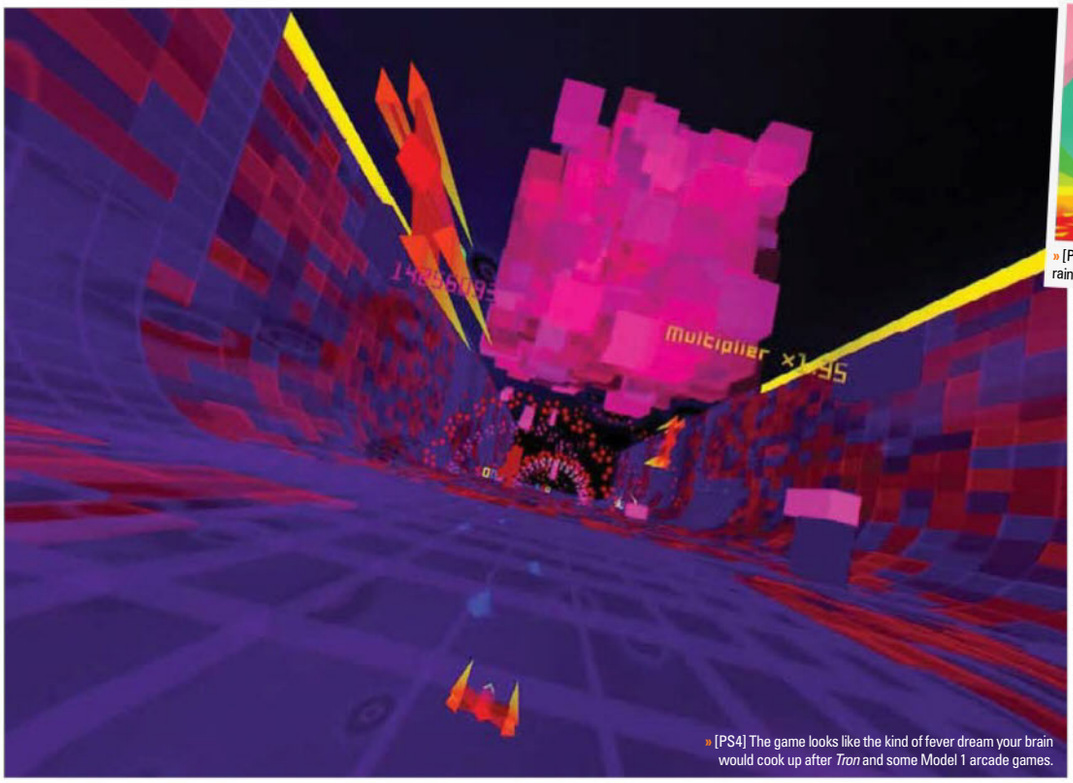
I played it at Play Expo Manchester while I cosplayed as *Ratchet & Clank*. It's brilliant and I had a lot of fun! It's like as if the colours and the pixelated objects are flying right towards me as I attempt to shoot at anything in my pathway. It felt as if I'm actually in the game! Heck, I'm surprised I didn't feel sick after playing this game!
Wing See Li

An assault on the senses (in an awesome way!). That was just ten minutes of gameplay. Having access at home could be lethal.
Simon Morgan

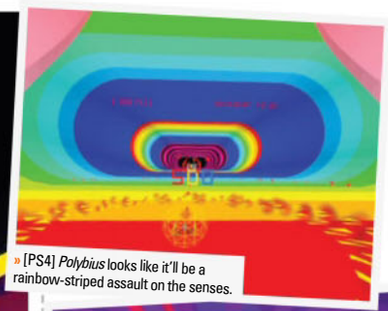
I saw the demo online and it gave me a splitting headache, hoping to give it a go on the original hardware at some point, though, as I loved *TxK* on the Oculus.
the_hawk

I want to remember, but all that remains is a blank spot in my day from around that time.
gamersgraveyard

Were there men in dark suits waiting to take away anyone who played it?
Negative Creep



» [PS4] The game looks like the kind of fever dream your brain would cook up after *Tron* and some Model 1 arcade games.



» [PS4] *Polybius* looks like it'll be a rainbow-striped assault on the senses.

» [PS4] Crazy explosions, we think. It's hard to be sure with *Polybius*.

"I just like working on leading-edge stuff because it's interesting to be working with new tech"

Jeff Minter

edge stuff where I can because it's interesting to be working with new tech and seeing what you can do with it.

Is it just yourself and Giles working on *Polybius*?
Just us two on all the game design and coding. There's a bunch of great musicians who contribute musically and who do some really great work.

Why did you choose to develop it for PlayStation VR?
We've been interested in VR for a while now and worked with some prototypes of PlayStation VR. The PS4 version of *TxK* supports PlayStation VR, and that made me realise that a third-person arcade style game actually can work really well as a VR experience, so developing a new game in that style for PlayStation VR was appealing.

What's exciting to you about PSVR from a developer point of view?
It's actually a really good VR system especially once you get to the kind of territory Giles manages to get out of our engine even on a stock PS4 – 120fps, 2x oversampling – stuff has never looked so smooth and solid. It's priced reasonably accessibly and doesn't need a massive PC to run on. It's also by far the most comfortable headset to wear, especially for glasses wearers, like me. It's capable, well-made and comfortable which is important in something you are going to be working with all day.

Would you be tempted to revisit any of your old games in this medium?
TxK worked well in VR, so maybe other games might (I already did a VR version of *Minotaur Rescue* as my first ever try at VR a few years ago). But it's equally fun to come up with new stuff too.

How does *Polybius* differ from your other games?
It touches on the racing genre. It's not a racing game per se but it does mix attempting to fly a propitious route into the shooting action, and I've never done anything in the racing genre, at least not since crappy character mode upscrollers on the ZX80. It's also the most insanely-fast game I've made, in both speed of play and frame-rate (120Hz looks awesome).

» Jeff likes to keep it real with his work and uses an old-school, Model M-like keyboard.

Will there be an option to play it on a regular TV like *Rez Infinte*?
Yes, although it won't be as immersive obviously, and it'll only be 60Hz.

What was the reception like from playtesters at Play Expo?
Pretty much everybody liked it and picked up how to play it quickly and well. We had people constantly queueing to play the whole weekend. We had some people come off the game and swear that they were now going to buy the PlayStation VR. And we didn't have a single instance of VR-sickness – despite it looking amazingly intense this game is designed to be absolutely non-sickness-inducing, it's very safe.

BREAKING DOWN THE MYTH

What are the truths behind the lie?

ARCADE SICKNESS
Brian Mauro, a 12-year-old attempting the break the *Asteroids* high score record, abandoned his attempt at 28 hours due to stomach pain. On the same day and at the same arcade, Michael Lopez developed a migraine headache and collapsed following a game of *Tempest*.

MEN IN BLACK
Less than two weeks after the sickness incidents, law enforcement officers raided a number of arcades in the same area. Operators had been illegally modifying their arcade videogames for gambling use, and arcades had become a hotbed for sales of illicit goods.

WHEN AND WHERE
Just as in the rumour, all of these events took place in Portland, Oregon. In fact, thanks to a local newspaper report on the *Asteroids* sickness incident, we can place the events late in 1981 – some time in November, possibly stretching into December for the raids.

POLYBIUS
This Greek historian was one of the first to utilise a rigorous and scholarly approach to his work. One of Polybius' most notable opinions was that historians should only chronicle events if they could interview the participants themselves. Coincidence? Maybe not...

NEW GAMES FOR CLASSIC CONSOLES

Piko Interactive's Eli Galindo tells us about his exciting new games line-up

Piko Interactive is a relatively new company in the retro gaming sphere, but it has already found a lot of success since establishing itself as a business with Kickstarter funding back in 2013. It makes both physical and digital games for a variety of systems, including the Mega Drive, GBA and SNES, and specialises in localising games that never appeared in the west. The company secured a number of unreleased and licensed games, including *Apocalypse II* for the SNES and *Duke Nukem 3D* for Mega Drive, and it has recently launched its first Jaguar game, *Custodian*, one of seven titles that are due for release. We spoke to founder Eli Galindo to find out more.

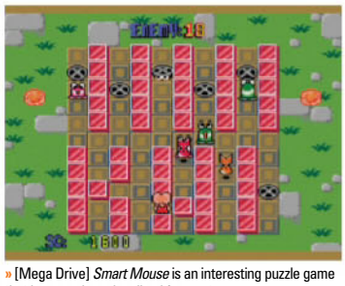
» [SNES] Bringing back old games is very welcoming, particularly when the originals are so expensive.

How long has Piko Interactive been producing games?
We launched the company with a Kickstarter Campaign in early 2013. Since then we have not stopped releasing new games!

How do you acquire the rights for Chinese original developments?
The company Super Fighter Team, which has been releasing old games and translations officially longer before us, had concentrated on acquiring the rights of Taiwan exclusives. We acquired those titles from them and a few more.

Who handles the translation and programming work required to localise such games?
We hire people that have worked on fan translations or actual official translations and localisation of games; we then dump the script and off they go on a translating spree!

How do reprints such as *Legend* and *Iron Commando* differ from the original releases?
We acquire the rights from the original developers, in the case of *Legend* it was Arcade Zone.


» [Mega Drive] *Smart Mouse* is an interesting puzzle game that has now been localised for western gamers.

> **"We have plans for more Jaguar releases like Switchblade and Indigo"**
> Eli Galindo

***Custodian* is Piko Interactive's first game for the Atari Jaguar. What drove the decision to enter the market for this platform?**
Custodian was the only game we had a licence for that had no immediate cart release project. So it was chosen to be ported to the Jaguar for that reason.

Why is its $74.99 price higher than your other games?
There is a lot of initial investment like designing PCBs, porting the game etc. that drives up the price. To offset that we'll include a coupon for our store inside the first 150 *Custodian* games, and $5 off on the next $50. Later Jaguar releases will not be priced as high.

The blog announcing these preorders noted that versions of *Snakky* and *Sumo Slam* are expected to run to 200-250 units, with no reprint runs. Is this sort of print run typical for Piko's games? What determines if a reprint run will or won't be made available?
For games that are smaller-scale titles we don't do anything over 250 units. I think *Snakky* will stay at 100-150 and *Sumo Slam* 200-250. The calibre of the game determines the print run so smaller scale, less copies, also if it is a popular genre that may help to ensure more copies are made.

» Eli Galindo started up Piko Interactive on Kickstarter. It's now a very prominent publisher in the retro community.

What does Piko Interactive have planned for 2017?
We have plans for more Jaguar releases like *Switchblade* and *Indigo*. [We are planning] a campaign for *Jim Power*, which will involve a production run for probably every retro console out there, including a new NES version developed from scratch, a Genesis version, a repolished SNES version, US Turbografx version, a new Jaguar version and a reworked CD32 version. More Genesis game translations from Taiwan exclusives, as well as brand-new developments, unreleased SNES games, and *Tyrannosaurus Tex* for the Game Boy Color. Man, I think 2017 will be too short to fit all of those in!

Visit pikointeractive.com for more information.

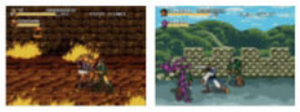
NEW KIDS ON THE BLOCK

Piko Interactive's new games in full...

CUSTODIAN
» **System:** Jaguar
» **Price:** $74.99

SUMO SLAM
» **System:** Mega Drive
» **Price:** $24.99

SMART MOUSE
» **System:** Mega Drive
» **Price:** $29.99



GENERALS OF THE YANG FAMILY
» **System:** Mega Drive
» **Price:** $34.99

IRON COMMANDO
» **System:** SNES
» **Price:** $54.99

LEGEND
» **System:** SNES
» **Price:** $44.99

SNAKKY
» **System:** NES
» **Price:** $24.99

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retro radar column

Here's my bio... Paul Rose

Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser*. These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.

Console Tribalism

When I was at school you were either a ZX Spectrum owner (as I was), a Commodore 64 kid, or one of the elites whose parents were rich enough to afford a BBC Model B. Everyone, it seemed, had at least one or another. Apart from my mate Jon, who for some reason had an Oric Atmos, because he simply had to be different.

Back when I was writing Digitiser for Teletext, we'd get letters accusing us of being both pro and anti all the major systems. We ended up adopting the slogan, "We hate everyone equally," just to ram home the point that we had no real preference. Well, obviously we preferred the Super NES to the Mega Drive, but that's to be expected…

Nevertheless, it always troubled me that gamers would become so fiercely protective of their chosen systems. It got me wondering why they do it. What's the deeper reason behind it, other than wanting to protect something that you've spend hundreds of quids on?

Here's my theory: so, humans are pretty rubbish as animals go. We've got a well-developed brain, but when it comes to natural defences, we lack claws, sharp teeth, strong legs, or the ability to squirt foul smells from our orifices. Well… as a form of defence anyway. Basically, we're not meant to be alone, because we would be eaten by sabretooth tigers or dinosaurs.

Instead, humans had to evolve a social structure as a form of defence, because there's strength in numbers. We've become social creatures. That is our defence mechanism. We formed tribes, then villages, then towns, then countries, and all along the way we armed ourselves to keep safe from the other tribes.

The world is a hologram – smash it into tiny pieces, and the main image will be preserved perfectly on each of those smaller shards. You can see our social instincts as reflected in rampant nationalism as you can in 'my console is better than yours' playground debates, or the multiformat mag letters page arguments of yore.

Tribalism results in various interactions, such as kin selection – from which a group with a strong sense of unity and identity ("I'm an Amiga owner!") offers benefits such as shared resources (swapping disks full of pirated games) – and strength in the face of conflict with rivals ("Death to Atari ST owners!").

Indeed, tribes have a tendency to unite against other tribes in a violent and prejudicial fashion. All those times you got attacked for your choice of games system, or aggressively defended your choice to others, all you were doing was acting out of evolutionary necessity.

Here's something else for you to think about: according to a study by the anthropologist Robin Dunbar, primate brain size is determined by the size of its social group. So according to Dunbar, people who bought, say, the Atari Jaguar, 3DO or CD32 are less intelligent than those of us who went for the PlayStation or Wii.

Remember: it's not my theory. I'm not the one calling you stupid, I'm just the messenger… *

What do you think?

Do you agree with Paul's thoughts? Contact us at:

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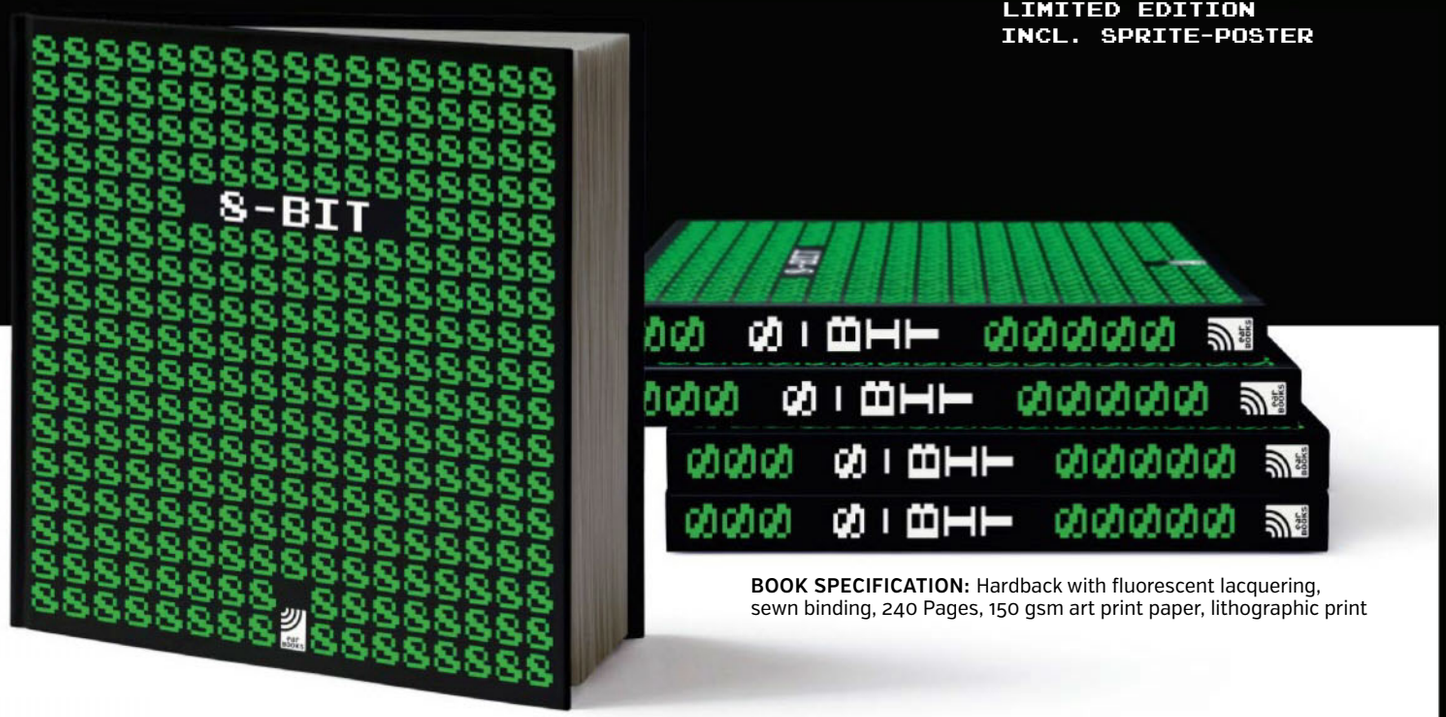

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THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

The Fantasy Art Of Oliver Frey: Extended Edition

It boggles our mind that we first covered this sumptuous-looking tome back in 2006. Thanks to a recent Kickstarter, *The Fantasy Art Of Oliver Frey* has been republished and enhanced, making it a must for fans of Oliver's distinctive art style. The *Extended Edition* features lots more art that was cut from the original, while the layout has been improved throughout. Editorial tweaks have been made, while it now features a beautiful hardback cover. It's simply the definitive edition of a fantastic art book that no Oliver Frey fan should be without.

Price: £25 **From:** fusionretrobooks.com

Final Fantasy Trading Cards

With a cast of hundreds of memorable characters, monsters and Summons, basing a trading card game on *Final Fantasy* was a no-brainer, really. So far, the *Final Fantasy Trading Card Game* has proved popular in Japan, with praise being directed at its strategic and novel way of playing. The cards themselves feature art from the original games, along artwork from more recent crossover titles, such as *Dissidia*. So far you can pick starter decks that are based on *Final Fantasy VII*, *X* and *XIII* with more to follow in the coming years.

Price: £20 **From:** amazon.co.uk

The Bitmap Brothers Universe

As good as *Sensible Software 1986-1999* was, we found its Q&A format made for some rather dry reading. Fortunately, *The Bitmap Brothers Universe* utilises a more conventional narrative structure and it makes it a far more enjoyable read as a result.

And there's certainly a lot to cover in this excellent book. The access throughout is superb with a huge number of members interviewed, including cofounder Mike Montgomery, who offers remarkable insight into the studio that was such an important part of his life. Every aspect of the company is covered, from its highs to its lows, and most of the games are given due care and attention. The design in the book is rather sparse, but it's saved by some fantastic behind-the-scene access and some stunning new artwork from Dan Malone. An essential read for anyone that fell in love with a Bitmap Brothers game.

Price: £30 **From:** readonlymemory.vg/shop

PICK OF THE MONTH

Triforce T-Shirt

Feel big and clever by walking around in this lovely-looking T-shirt from Gametee. People will look at you thinking you're wearing an inspirational message on your chest, but really you're just a secret *Zelda* fanboy (and you love it). If you're not a fan of *Zelda*, Gametee has plenty of other cool designs, including an amazing Power Glove tribute.

Price: £17.99 **From:** gametee.co.uk

Atari Socks

Winter is coming, so why not wrap up with these retro socks? They're made from premium cotton, and will fit UK feet sized from six to 11. Best of all, though, are the actual designs. While we don't care for the pair featuring the standard Atari logo, the *Missile Command* and *Breakout* designs are fantastic. We just need matching jumpers now and we'll be sorted.

Price: £11.99 **From:** funstockretro.co.uk

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Collector's corner

Readers take us through the retro keyhole

BIO

NAME: Faye Evans

TWITTER: @kingdomofcarts

LOCATION: Cardiff

ESTIMATED VALUE: £18,000 +

FAVOURITE SYSTEM: Mega Drive

FAVOURITE GAME: *Streets Of Rage 2*

Although she has been a gamer for many years, Faye's passion for retro collecting was only ignited in 2009 when, in late summer, she went on a date and ended up back at her future boyfriend's house, playing *Teenage Mutant Hero Turtles* on the NES till the small hours. "I'm still with the same guy now," she smiles, "and we often hold retro gaming tournaments in our apartment. *Bushido Blade* and *Excitebike* are firm favourites!" Fortunately, despite their early shared experience on the Nintendo console, Faye's boyfriend grew up with the Commodore Amiga and Sega Mega Drive, so any console rivalry is kept to a minimum. As fans of gaming new and old, the couple soon began picking up games that initially held nostalgia for them. "But we soon grew to feel that it was important to enjoy and preserve all games, after having several conversations in charity stores where the staff would tell us they just threw the old ones away as no-one wanted them anymore," explains Faye.

Faye's favourite console of all time is also the main format she collects for. "I have around 400 Mega Drive games and to get a total PAL collection would be amazing. I have so many fond memories of playing on the Mega Drive with my entire family, and it has some of my favourite games of all time on it. I remember my mum taking me to the local video shop at the time and renting out games such as *Paperboy, Jurassic* Park and *The Addams Family,* to name but a few. It seemed to have games for every taste, from child-friendly adventures such as the awesome Disney games, to teen and adult games such as *Splatterhouse 2* and *Flashback.*"

In addition to the Mega Drive, Faye's collection also boasts 50 other systems, 2,150 games and two arcade cabinets. She is also a big handheld fan, and keen to bolster her set of Nintendo's popular *Game & Watch* series. "They are quite expensive to collect, but the gameplay on them is solid, and they have a real charm about them that I love." Faye laughs when **Retro Gamer** asks whether she'd ever consider selling her collection. "Sell it? I'll be buried with it!"

MAXIMUM CARNAGE QVC BOX SET

"I bought this on eBay and had it shipped from the USA. It includes a graphic novel, badges, red cartridge and original certificate. It's limited to 5,000, so is really cool to have."

PAID: £50

ENTEX PAC-MAN 2

"A close friend picked this up for a pound from a boot sale and kindly offered it to me as a gift. It's a really fun two-player version of *Pac-Man* with the second player being a ghost. This is a real family favourite and shows that great games never age."

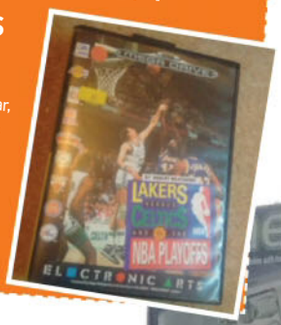
PAID: £0

JEWEL IN THE CROWN

LAKERS VERSUS CELTICS AND THE NBA PLAYOFFS

"This was truly amazing and unexpected. I was casually reading up on rare games last year, and this one is so hard to find, its existence was disputed. It seemed familiar, and I discovered I had one in my collection that I had picked up for a quid at a car boot sale! As far as I know, [it's] one of only ten copies in the world."

PAID: £1



MUTANT LEAGUE HOCKEY

"You don't expect to get a bargain in a retro games store, but this was in the sports section and I picked it up for a fiver! I was shaking as I paid for it because I thought I'd be 'found out'!"

PAID: £5

TROUBLESHOOTER

"I ordered the full *John Madden* series for the Mega Drive on eBay and this came free with it. One of the best free gifts ever, and a cool game to boot!"

PAID: £0

GAME BOY

"My original Game Boy. I remember playing countless hours of *Super Mario Land* and *Jellyboy.* I used to carry it everywhere!"

PAID: £0

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retro GAMER.net READER'S REVIVAL

Cybertron Mission

"BRUTICUS HATES CYBERTRON! BRUTICUS HATES YOU ALL!"

#107

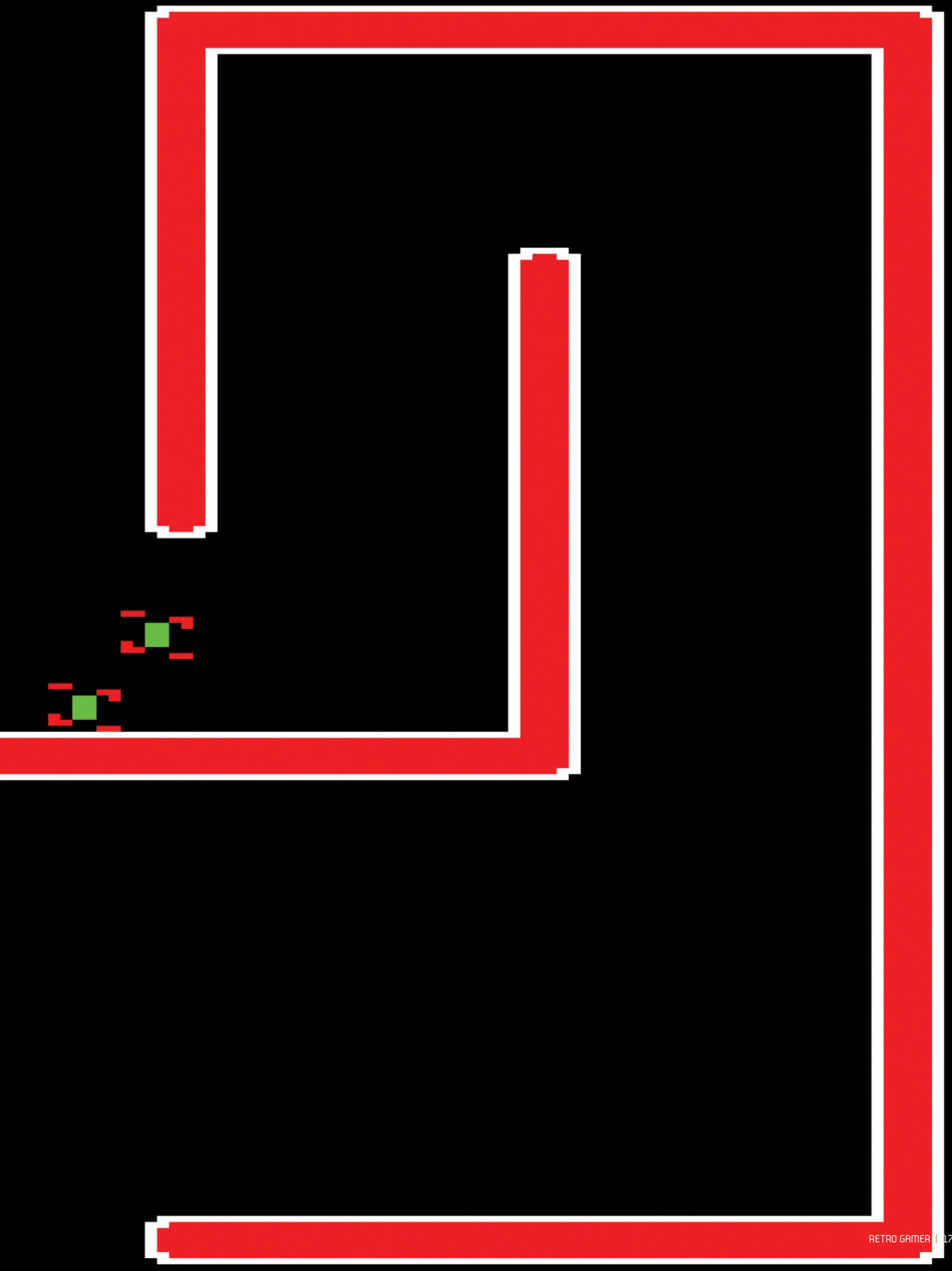
» MATTHEW BATES » BBC MICRO » 1984

If you've ever read about the making of *Robotron: 2084* you'll know that it's creator, Eugene Jarvis, was heavily inspired by Stern's 1980 arcade game *Berzerk*. Ultimately *Robotron* would become a single-screen manic shooter, but if Jarvis had not evolved his original inspiration quite so far, the result would almost certainly have resembled *Cybertron Mission*.

Matthew Bates' game takes the maze-wandering theme of *Berzerk*, adds the gaudy colours and myriad robots of *Robotron* and adds an element of item-collecting for good measure. The aim on each level is to avoid or shoot the robots (and also the electrified walls) and find a specified item that will transport you to the next level. Much like it's influences, each screen is filled with robots that pursue you relentlessly and if you hang around on a screen for too long then you will be attacked by an indestructible ghost, the spiritual successor (pun intended!) to *Berzerk*'s Evil Otto.

While the game's influences are obvious, *Cybertron Mission* is very well presented, adds enough originality to stand out and is a thoroughly enjoyable experience.

MAT CORNE



CHAS

INSTRUCTIONS

BACK WHEN COPS AND COOL CARS WERE ALL THE RAGE ON TV, TAITO GAVE US THE OPPORTUNITY TO LIVE OUT OUR FANTASIES OF TAKING PART IN A HIGH-SPEED PURSUIT. NICK THORPE HAS BEEN DISPATCHED TO INVESTIGATE THIS CLASSIC COIN-OP…

» [Arcade] Smashing through roadblocks, boxes and other such obstructions is all part of the police chase fun.

Police chases are amongst our guiltiest of pleasures. Are they exciting? Yes, without a doubt – but they're also extraordinarily dangerous for everyone involved, from the escapees and their pursuers to the dozens of innocent drivers and passengers in their path. Fortunately, videogames allow for us to indulge in these forbidden pleasures without putting anyone else's life in jeopardy, and in the late Eighties there was no better way to participate in a police chase than to drop some change into *Chase HQ*. You play as Tony Gibson and Raymond Broady, members of the police's elite Chase HQ department, who are tasked with tackling the high-speed pursuits that other officers just aren't qualified for.

In many ways, the premise made it a perfect game for its time. The Seventies had produced great car chase films as well as *Starsky & Hutch*, but the

C.H.Q.

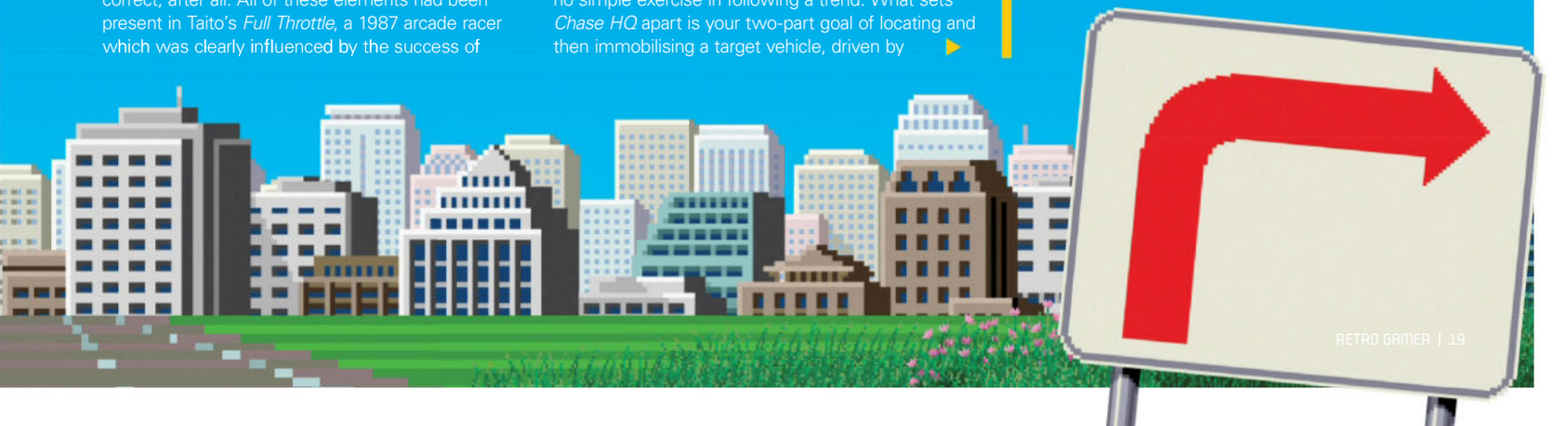
» [Arcade] You'll often set criminal cars ablaze by ramming them, but they never spontaneously explode like in the movies.

» [Arcade] You'll know when you've found your target, thanks to a red warning and large arrow.

Eighties was the era where they were all over TV in popular cop shows. Where American muscle cars were often the focus of the chase movies, shows like *Magnum, P.I.* and particularly *Miami Vice* often featured European sports cars, including the likes of Porsche, Ferrari, Lamborghini and Lotus vehicles. Taito took major inspiration from these sources for *Chase HQ*, incorporating similar cars and a definite American theme. In particular, the designers focused on Porsche – two of the five enemy vehicles are from the German manufacturer, and Gibson and Broady used a Porsche 911 exclusively.

As a game, *Chase HQ* is superficially similar to many other Eighties racers – the powerful sports car, scaling traffic and time limit are all present and correct, after all. All of these elements had been present in Taito's *Full Throttle*, a 1987 arcade racer which was clearly influenced by the success of Sega's hit *Out Run*. Its main innovation was allowing the player three turbo boosts per checkpoint, which had to be strategically deployed on straight roads and low-traffic stretches. It wasn't a revolutionary game by any stretch of the imagination, but it did well for Taito.

Chase HQ incorporates all of those elements, and then plunders a little more from *Out Run* by incorporating forked roads. However, *Chase HQ* was no simple exercise in following a trend. What sets *Chase HQ* apart is your two-part goal of locating and then immobilising a target vehicle, driven by ▶



CHASE H.Q.

» [Arcade] Ramming enemies is most effective when you've engaged a turbo boost.

Q&A: MARK EDWARDS

WE CHASE DOWN THE MAN BEHIND THE GRAPHICS OF THE 16-BIT COMPUTER CONVERSIONS

What did you think of the original arcade game?
I loved it. At the time there were many arcade racing games but this had a unique twist. It also held a subtle [old-school] TV style look to the game and this was something I was brainwashed with as a kid. My dad was also in the police force, so maybe this helped!

Why was Teque Software commissioned to create the 16-bit ports by Ocean?
Our MD, Tony Kavanagh, had links with Ocean, especially Gary Bracey at the time. Krisalis had a name and a knack for arcade conversions with the likes of *Toobin*, *Scramble Spirits*, *Continental Circus* etc...

What was hard about working on the Atari ST and Amiga versions?
As with all conversions, copyright logos and style are of the utmost importance. I remember struggling to get the loading screen right and this created many a laugh with my fellow artists.

How much support did you receive?
Very little I feel. All feedback came back via Ocean. Back in those days game development was easier in many ways. We had little feedback compared to what I'm working on now – *Dead Island 2*...

Who worked on the project and how long did it take?
From what I remember we had around six months to convert it to all formats. This was quite a feat for all projects we were handed and something I'm proud of with such a small development team.

Did you create the loading screen and were you aware the main character is based on Han Solo?
I did indeed, and no I didn't know this... I really struggled with the lips as far as I can remember!

What's the best anecdote you can remember whilst working on *Chase HQ*?
Whenever I think of *Chase HQ* I always think of the struggle I had drawing those lips! I really enjoyed those times, much more so than now. Krisalis was a great company to work for.

The scores at the time ranged from 55% to 90%. Were they a fair reflection of the game?
I think so, it's a fair result given the time we had to extract graphics from the arcade version and convert to the many formats.

How do you think your version holds up today?
I'm pretty shocked to see it now after going though 20+ years of game advancement. At the time it had charisma and a certain look, as mentioned. It's lovely to think some old folk still love this game and [it's] something I'll always treasure.

Why do you think *Chase HQ* remains so popular?
Back in those days there was a *lot* of competition. Fortunately, we had a unique advantage with an arcade conversion. A game that was thoroughly tested and embedded in the Nineties kids. How could it ever fail, given a good conversion!

▶ a lowlife criminal. This isn't a simple endeavour, mind – you need to avoid the many law-abiding citizens using the road, both to ensure their safety and ensure your target doesn't get away. Each successful overtake awards 200 points more than the last, rewarding you for clean driving. However, clean driving goes out of the window when you finally reach the bad guy, as your only option for taking down the perp is to ram his car off the road.

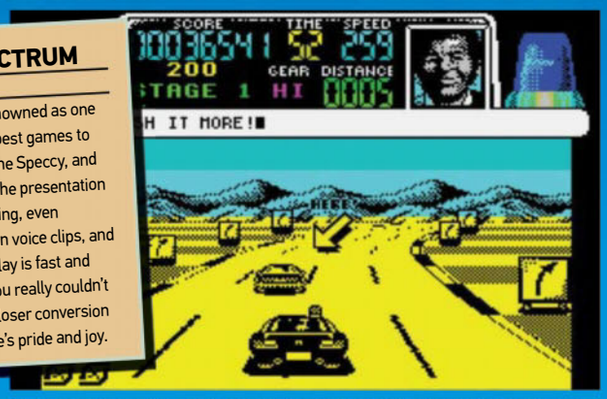
A large part of what makes *Chase HQ* so good is the excellent presentation of the game. At first glance, you might think that it doesn't advance the genre over *Out Run*, given the relatively similar sprite scaling technique. However, it soon reveals itself to be even more visually impressive. The game incorporates proper tunnel sections, split-level road drawing to properly represent ramps, and excellent incidental animations such as a helicopter hovering overhead to help scope out your route. Likewise, the ace music could have come out of any American cop show of the era, particularly the bassy tune that plays during the briefings you receive from Nancy, the Chase HQ radio dispatcher.

Speaking of Nancy, her mission briefings are a joy to sit through thanks to the full voice acting provided for each stage. Brilliantly, even the crimes she tells you about reflect the preoccupations of the time, as you can see from the inclusion of drug pushers ▶

» [Arcade] Civilian traffic has a tendency to obstruct your attempts at destructive justice

CONVERSION CAPERS

WE SORT THE GREAT LITTLE RUNNERS FROM THE CLAPPED-OUT CRAP



ZX SPECTRUM
1989

■ This is renowned as one of the very best games to appear on the Speccy, and rightly so. The presentation is outstanding, even squeezing in voice clips, and the gameplay is fast and smooth. You really couldn't ask for a closer conversion on Sir Clive's pride and joy.

AMSTRAD CPC 1989

■ It's not as quick as the Spectrum version, but the difference is no huge deal and in every other respect this is another amazing conversion. It packs in everything else that makes that version great, and the colour graphics give it a edge over its 8-bit rivals.

COMMODORE 64 1989

■ If the people behind *Chase HQ* for the C64 were actually in *Chase HQ*, you'd be ramming them off the road for the murder of a classic. Not only is it visually underwhelming, it's so slow that your crime-fighting efforts would be better carried out on foot.

MSX 1989

■ This looks like the Spectrum version, but don't be fooled – it's slower and doesn't include much of the brilliant presentation. It's better than the C64 version, but that's not saying a lot. It's also quite a rarity, having been released in limited parts of Europe.

AMIGA 1989

■ There's little to differentiate between the Atari ST and Amiga conversions of *Chase HQ*, which means you're good with either. To be honest, though, it's made to look a bit poor by *Lotus Turbo Challenge* and the driving sections in *Batman: The Movie*.

ATARI ST 1989

■ This conversion was developed by Teque, the same company behind the C64 version. The game fares better on the ST – it looks nice in static shots, but it does run slowly and the handling is poor. There are better conversions out there, so play those instead.

FAMICOM 1989

■ This is an attractive conversion for the 8-bit console, complete with speech and support for the analogue *Arkanoid* controller. It also goes a step beyond the arcade game by allowing you to trade your points for new car parts between stages.

MASTER SYSTEM 1990

■ This is a pretty good conversion. It's based off of the Famicom version, and includes the same upgrade options. It's fast and attractive, but the scenery lacks variety due to the flat roads and total lack of tunnels. This version is exclusive to PAL regions.

PC ENGINE 1990

■ This is a fast and nice-looking conversion featuring good music, nice visuals and most of the arcade game's luxuries. Most of the corners seem a bit severe and the engine noise is rather annoying, but this is definitely one of the better versions out there.

GAME BOY 1990

■ The game doesn't look too bad in monochrome, but *Chase HQ* on the Game Boy is poor. It doesn't handle very well, and in a driving game that's a ruinous problem. *Super Chase HQ* is a far better take on the same idea for this format, so play that.

GAME GEAR 1991

■ The *Chase HQ* experience on Sega's handheld is almost exactly the same as on the Master System, to the point that it runs in the hardware's Master System graphics mode. The only difference is a redrawn HUD that looks better on the small screen.

SHARP X68000 1992

■ This Japanese computer is renowned for some excellent conversions, but *Chase HQ* isn't one of them. Object movement is jerky and the scenery has been rendered horribly bland, with no off-road sections or forks in the road. The music is pretty good, though.

SATURN 1996

■ You'd expect an arcade-perfect conversion here, but it's different to the coin-op original, with redrawn sprites and differences in visual effects. It's still the closest home version – just don't expect the near-identical closeness of a *Sega Ages* conversion.

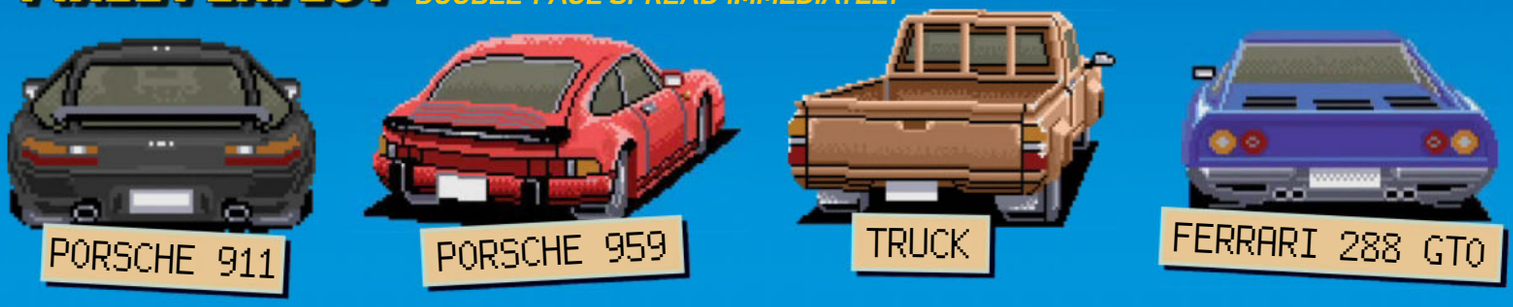
FM TOWNS
1991

■ Here's an astonishing conversion, which is very close to the original. The view is a bit narrow and the scaling isn't as smooth, but in all other respects this is utterly superb. However, the hardware trickery used to run this causes some persistent colour glitches.

CHASE H.Q.

PIXEL PERFECT

CALLING ALL CARS... REPORT TO THE DOUBLE-PAGE SPREAD IMMEDIATELY



» [Arcade] This whirlybird will help you out by telling you where the criminals are headed next.

» [Arcade] Tunnel effects were a noticeable improvement over previous arcade racers like *Out Run*.

▶ (a year before the debut of the 'winners don't use drugs' screen) and Eastern bloc spies (a year before the fall of the Berlin Wall). She'll also warn you if you're running low on time during a stage, and that's not the only voice acting you'll be treated to. Your partner will often encourage you with phrases like, "Let's go, mister driver," and has individual lines for each of the game's five arrest scenes.

The success of the arcade game was immediate upon its release in 1988, and Taito quickly seized on its popularity with a series of home conversions. For the European home computer market, rights were granted to the licensing powerhouse Ocean, which managed to stage an impressive multiplatform release in 1989. As well as covering the usual 8-bit and 16-bit machines, an MSX version was produced for continental Europe which was distributed by Erbe Software. If you're surprised by the fact that it wasn't a Japanese release, that's because Taito wasn't tremendously proactive in chasing the domestic home computer market – two versions were released by different companies for the high-end computers of the time, with wildly different results.

Instead, Taito concentrated its efforts on the home console market. The PC Engine received a relatively straight conversion, but the Famicom, Master System and Game Gear versions all offered a somewhat deeper experience – perhaps in recognition of the fact that the arcade game only lasted ten minutes once mastered. The five stages of the arcade game were repeated three times, and points could be traded for car upgrades between rounds. Your oil, tyres and bumper could all be upgraded, while extra turbo boosts and a supercharger could be added to give you the speed needed to bust some of the tougher criminals.

Most of the elaboration on the *Chase HQ* formula would come through sequels, though. *Special Criminal Investigation* followed the same 'pursue and destroy' formula, but gave you the option of shooting the criminal vehicle with a gun. It was another popular game but one which didn't receive the wide home release of its predecessor. *Chase*

"At the time there were many arcade racing games, but this had a unique twist"

Mark Edwards

HQ II for the Mega Drive introduced a choice of player vehicles, allowing you to trade in your sports car for a slow but devastating truck, and the second arcade sequel, *Super Chase: Criminal Termination,* retained this option but shifted the action to a first-person perspective. *Super Chase HQ* for the SNES would also adopt this viewpoint.

By the mid-Nineties the appetite for *Chase HQ* had waned, and Taito pursued other ventures – but it did bring the series back a couple more times later on. In 2000, *Chase HQ: Secret Police* for the Game Boy Color adopted the *Special Criminal Investigation* mixture of driving and shooting, but added an odd tactical map section in which you place officers around town and try to intercept the criminals prior to the main chase. The arcade game *Chase HQ 2* arrived in 2007, and it offered full-3D visuals ▶

» [Arcade] Time of day effects are a big part of *Chase HQ*, showing the passage of time during your pursuits.

Q&A: BILL HARBISON

WE SPEAK TO THE GRAPHICS ARTIST BEHIND SPECTRUM AND AMSTRAD VERSIONS OF CHASE HQ

What made *Chase HQ* such a good game to play?

It was a fast, slick arcade game which wasn't just about driving towards a goal. It had an extra layer on top which made it all the more playable. Without the addition of catching the criminals by bashing their car off the road *Chase HQ* would have been just another *Out Run* clone. So when myself and Jon O'Brien were informed that we would have to try and cram this beast into a ZX Spectrum we didn't take the job lightly. We wanted to do the best job we could, our job was to outrun *Out Run*!

Were you aware of the poor reception that the *Out Run* conversions had received and did you want to improve on that with *Chase HQ*?

Before I got into the industry I remember getting a cover tape with a magazine containing a playable demo of *Out Run*. It was crushingly disappointing! The car was nicely drawn and some of the other objects were fine but it wasn't particularly playable. It was slow and the roads were badly defined. There had already been superior racing games, like *Enduro Racer,* on the market and even further back there was *Full Throttle*. I think I probably played it just the once before taping over the cassette with something else. It seemed to me at the time that it wouldn't receive favourable reviews, although I now understand that it has its fans.

A few months before starting on *Chase HQ* I had worked on a racing game that was superior to *Out Run*. That was *WEC Le Mans*. If we managed to make *Chase HQ* as good as that we would have been onto a winner.

How did you become involved with the Spectrum and Amstrad ports?

I was working on *WEC Le Mans* which was coded by Sentient Software with Ocean's Mike Lamb. I was at a loose end after finishing by previous game and was brought on board to help with the graphics. While this was happening, Gary had employed Jon O'Brien who was working with Mike on the game engine and when *WEC Le Mans* was finished I moved over to *Chase HQ* full time.

How much access did you have to the original coin-op?

We were told about the game but I hadn't seen it before and before long the cabinet arrived at the office and caused quite a stir. I used to sit in the seat with an A4 pad and sketch the frames for the cars and the other graphics in the game. Within a couple of weeks the cabinet was taken away and we were left with the circuit board and steering wheel hooked up to an old TV. At least we had access to the game and we didn't have to pay a penny to play it.

What differences where there between the 64k and 128k versions?

We managed to squeeze just about all the game into the ZX Spectrum with a few additional details like the character portraits and the ending. The portraits were mostly based on Ocean employees like Steve Thompson, Martin McDonald and Kane Valentine, while Nancy was based on Dallas Cowboys cheerleader Dorie Braddy. The ending was renditions of publicity shots from the, soon to be released, *Lethal Weapon 2.* The only additions to the 128k version were the superior music and digitised speech.

Because of the added colour we feel the Amstrad version is the best, is this something you'd agree with?

The extra colours make the game graphics look much brighter but the double-width pixels meant that some detail was lost on the cars and character portraits. It also seems like the Amstrad version is slightly faster, too.

Was there anything about the conversions that you weren't happy with?

I would improve be the enemy intro screen with the radio message. It's a little basic compared to the arcade version.

Why do you think it's generally considered as one of Ocean's best conversions?

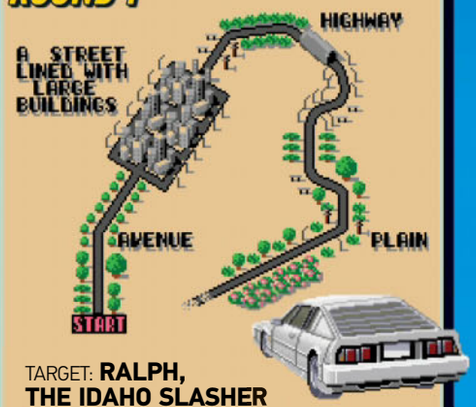
I think we managed to capture the spirit of the arcade and make it fast and smooth – and bouncing title screen. Little touches like that show that we wanted to do the best job that we could.

CHASE H.Q.

CASE FILES

FIVE DANGEROUS CRIMINALS NEED APPREHENDING IN CHASE HQ – HERE'S THE FULL LOWLIFE LOWDOWN

ROUND 1



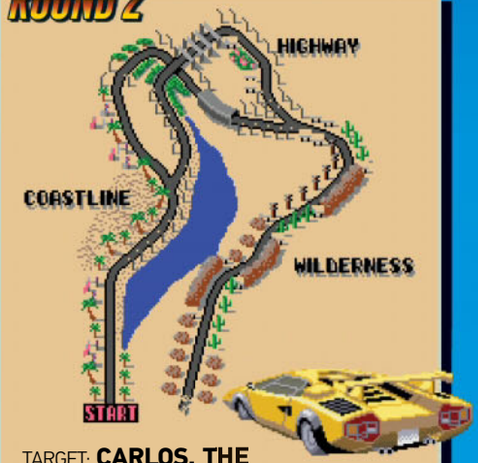
TARGET: **RALPH, THE IDAHO SLASHER**

WANTED FOR: FIRST-DEGREE MURDER

■ If this chase is actually taking place in Idaho, it can only possibly be Boise – it's not exactly a state known for its large urban communities, and this stage will take you from a lovely garden avenue straight into the city streets. Going right at the junction will take you off-road, slamming through construction barriers and shrubbery before heading out onto a cloudy plain. That's where you'll encounter the murderous Ralph.

» [Arcade] Quick! Ralph is making his escape and attempting to flee. Ram him off the road before he can do so.

ROUND 2



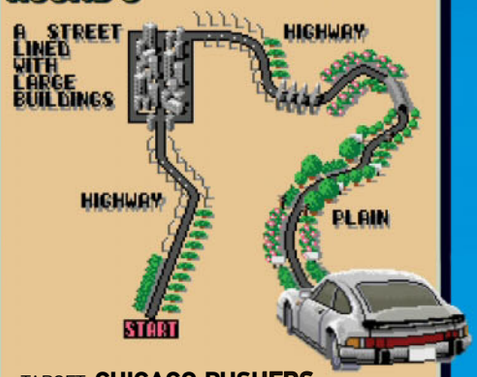
TARGET: **CARLOS, THE NEW YORK ARMED ROBBER**

WANTED FOR: ARMED ROBBERY AND MURDER

■ Carlos has wandered far from his home in the Big Apple, as the sunny coastline here suggests California. You'll get help from the helicopter in this stage, which hovers overhead before you reach the junction, where you can take the tunnel onto the highway or the ramp. You'll most likely catch up with our esteemed armed robber in the desert, where he's making a break for it in a flashy yellow car. Way to draw attention to yourself, dirtbag!

» [Arcade] Carlos would have possibly gotten away with armed robbery, but he was thwarted by a large yellow arrow…

ROUND 3



TARGET: **CHICAGO PUSHERS**

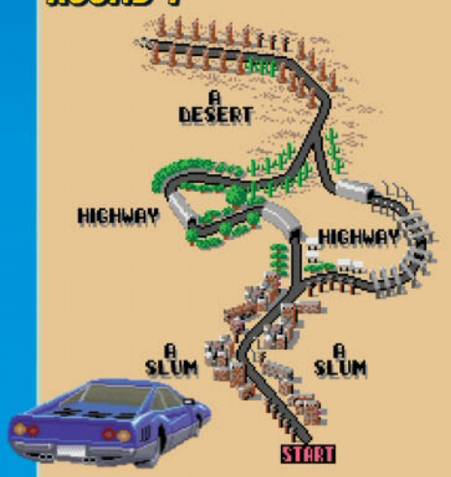
WANTED FOR: SELLING DRUGS

■ This place looks a bit like Chicago, so it seems we've caught our dealers pretty soon in their bid for freedom. You'll start off late in the afternoon, and it's quite a chase because when you've finally gone off-road via the left fork and caught up to the bad guys, the sun is setting and the sky is a beautiful shade of orange. Walter White should never have moved to Chicago!

» [Arcade] It's too nice an evening to chase criminals, but you've got a job to do and by gosh you're going to do it well.

> **"It was a fast, slick arcade game which wasn't just about driving towards a goal"**
> Bill Harbison

ROUND 4



TARGET: **LA KIDNAPPER**

WANTED FOR: KIDNAPPING

■ It's already early evening as you race out of the slums, and this jerk is in a powerful car so don't expect to catch him before nightfall. You'll have help from the chopper again here, and if you head up the ramp on the right you'll take the freeway out to the desert. For some reason, it's fine to ram into a kidnapper's boot, despite the likely presence of the kidnapping victim, so just go for it.

» [Arcade] The kidnapper's car took such a bashing, Gibson and Broady couldn't open the boot. We're sure everything was okay…

ROUND 5

TARGET: **EASTERN BLOC SPY**

WANTED FOR: ESPIONAGE AND FIRST-DEGREE MURDER

■ You don't get a map for this early morning chase, nor do you know what the spy's car looks like. Ultimately, that means that he's doing a pretty good job as a spy. Thankfully, you're able to identify him in a bright red car, rather than the standard issue Lada Riva or Trabant that his comrades back home have to put up with.

» [Arcade] Despite having guns, Gibson and Broady kept forgetting to use them. At least until the sequel…

» [Arcade] The game takes place in diverse settings from out-of-town freeways to inner-city slums and the suburbs.

▶ with a light cel-shaded look, with new features including power-up icons and oncoming traffic.

While seek-and-destroy racers aren't tremendously common today, the gameplay style has been incorporated into a variety of other racers. You can see traces of *Chase HQ* in the likes of *Driver*, which has a Pursuit Mode, some *Grand Theft Auto* missions, the *Burnout* series since *Burnout 3: Takedown* and, of course, *Need For Speed: Hot Pursuit*. The nearest equivalent in recent times though was the *Pursuit Force* series for the PSP, which takes the *Special Criminal Investigation* template and adds more vehicles plus some straight shooting sections.

So while *Chase HQ* series is currently in its longest period of inactivity, having been dormant since 2007, it's clear that the impact it made in the late Eighties is still being felt today. After all, why shouldn't it be? Any game that lets you live out your *Miami Vice* fantasies is fine by us, as is anything that lets you pull off a police chase without endangering lives. ✱

» [Arcade] Everyone has turned up to see you receive your reward for completing the game. All that's missing is a roaring wookie.

PANTH

When it came to gaming on a budget there is no doubting that Mastertronic was the label that set the golden standard, some of its games even put their full-price counterparts to shame. Panther was one such title, and Kieren Hawken finds out why

PANTHER

»[Atari 8-bit] Each attack wave is named after a letter from the Greek alphabet and advance warning is given via the status panel.

IN THE KNOW

- **PUBLISHER:** Mastertronic
- **DEVELOPERS:** Peter Adams, Chuck Peavey
- **RELEASED:** 1987
- **PLATFORM:** Various
- **GENRE:** Shoot-'em-up

In 1986 Mastertronic decided to move into the lucrative North American market and, after forming Mastertronic Inc., it also came to the conclusion that it needed a new label that would appeal to this fresh audience. The new label would not only republish some of its biggest hits from the UK, it would also release new games that could then be brought back across the pond. The company soon signed a deal with prolific US coding house Sculptured Software to help provide these titles. Sculptured had been formed a couple of years previously and had already experienced massive success thanks to conversions of titles such as *Beach Head* and *Raid Over Moscow* for Access Software. One of the key individuals of Sculptured was Peter Adams, who was not just one of the founders of the company, but also heavily involved in actually programming the games. Peter had previously become somewhat of an expert in coding titles that used isometric projection to create a pseudo-3D effect. As well as working on the hugely-popular Commodore 64 version of *Blue Max* for Synapse Software, he had also coded the C64 version of the smash-hit Sega arcade game *Zaxxon*, which is, in fact, credited as the first game to use this innovative technique. So it was almost inevitable that he would want to create something similar for Mastertronic, and that title would become *Panther*.

But Peter wasn't alone on *Panther* and, as he was already juggling other projects in his role as both coder and producer, he brought someone else in to help him. Looking for an individual with both experience of programming the C64 and the Atari 8-bit, the two formats *Panther* was originally developed for, he chose existing colleague Chuck Peavey. "Peter Adams was a big fan of *Zaxxon* and had this idea to make an isometric game in a similar vein for the Commodore 64 and Atari 8-bit," Chuck says. "I was brought in to work with Peter and code some of the more technical aspects. I always say that probably my biggest contribution was the algorithm that made the shadows of the flying saucers display on the ground. You wouldn't think that was a big deal, but in order for an isometric 3D game to work, you need a shadow so you know how close to the ground you are and this isn't something that's easy to get right!" Although Chuck had always seen himself as a C64 coder he had gained tremendous experience with the Atari computers by doing several titles for the Sunnyvale company itself. "Honestly, the Atari was not my preferred platform," Chuck says, going into more detail about his preferences. "I learned to program on a C64, I find it funny that later on most of my games were on the Atari! But I think my real love in this area was programming in 6502 assembly language, it was such a fun medium to work in. The 68000 on the ST and Sega Genesis was great too, but I can't say I've had as much fun programming since those days. There is just something special about that raw simplicity of coding at that level." Interestingly, Chuck also had some similar experience with isometric games to Peter, having been responsible for the Atari XE version of *Blue Max*.

»[C64] The enemy attacks are relentless and they generally attack in swarms.

The idea was that *Panther* would basically be an isometric version of the popular Brøderbund game *Choplifter* with you piloting your ship into a warzone trying to rescue the survivors. The plot in *Panther* is just as cheesy as you would expect: you are the last remaining pilot (as always!) from the Xenon Air Force. Alien invaders have swept away

THRILLING ISOMETRIC SHOOTERS

Panther is not the only great isometric shoot-'em-up out there, here are some more great examples to check out

ZAXXON

The game that kicked off the genre, Sega's 1982 arcade game was every bit as playable as it was groundbreaking, and it inspired ports and clones on just about every home system.

RETURN OF THE JEDI

Atari's arcade game took three key scenes from the climactic film and turned them into an enjoyable game featuring two different isometric shoot-'em-up levels.

HIGHWAY ENCOUNTER

Costa Panayi's chart-topper was the game that proved the Spectrum could push isometric graphics with the best of them. Ports to other systems followed as well as a sequel.

DESERT FALCON

This highly-impressive isometric shooter was originally released for the Atari 7800 but later ported to the 2600 and XE, although neither retained quite the same level of technical prowess.

BLUE MAX

Published in 1983, this was one of the earliest pioneers of isometric visuals on a home computer. The less popular 1984 sequel took the game into a post-apocalyptic setting.

H.A.T.E.

Another effort from Costa Panayi, *H.A.T.E.*, or *Hostile All-Terrain Encounter*, shared similar traits to Sega's *Zaxxon*, although in this offering you can play with either an airplane or tank.

DESERT STRIKE

EA's 1992 Mega Drive game was one of its biggest hits during the 16-bit era and spawned a series of sequels. Inspired by Middle East tensions, it was subtitled *Return To The Gulf*.

VIEWPOINT

This is without doubt one of the most famous isometric shooters out there. Released for the Neo-Geo in 1992 by Sammy, it was ported to a host of other machines soon after.

»[Atari 8-bit] Level three takes place over the ocean and you must look out for the small islands to land on.

the planetary defences and the population has been evacuated. Well, nearly all of it, a few people were left behind, the last line of defence trying to save the world including the scientists, generals, journalists and politicians. It is your mission to fly in and save them all – well, maybe not the crooked ones, but you get the picture. You have to fly your craft over both land and sea taking in several different environments. As well as making periodic landings to rescue the hostages you must also take out the enemy ships trying to stop you. Like *Zaxxon*, the ship can fly at different heights, in similar games it's often hard to judge your height, but the great use of shadows in *Panther* makes this a lot easier. You will also find that, due to some very nice programming in the AI department, the enemy ships often adjust their own height to match yours. While this makes it easier for you to take them out, it also makes it easier for them kill you too and avoiding them altogether is very difficult indeed. *Panther* also features variable speed to make landing easier – the higher you are, the faster you fly and vice versa. It's imperative that you land as close to each bunker as possible as the enemies soon home in your location, sometimes you will have to touch down several times before every survivor is rescued.

The change in scenery is one of our favourite parts of *Panther*, there is lush countryside, barren deserts and even an ocean-based level where you must carefully land on the small islands to rescue your friends. Flying round the scenery also becomes a key component of the game, it's even possible to crash your ship into the telephone poles!

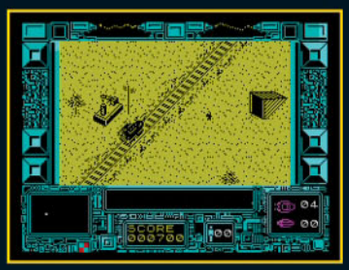
Programming a highly-technical game such as *Panther* was never going to be easy and Chuck experienced his fair share of problems. "On the Atari, you needed to use an interrupt to change the sprite we were using for the flying saucer to a sprite for the shadow. I was able to write code that executed in 128 machine cycles," he remembers. "I don't know if [people] know much about these things but I felt really good about it." He goes on to reveal more, "The Atari only had two four-colour sprites or four two-colour sprites that ran the full length of the screen but it had really good interrupts so you could move this stuff around. You can actually see this if you look at *Panther*. The little spaceships you are supposed to shoot are done with sprites, but because you need to show a shadow to give the player the idea of how high above the ground the spaceship is,

»[Atari 8-bit] You need to look out for the entrances to the underground bunkers and land as close as possible.

»[C64] Enemy saucers will also employ evasive manoeuvres in order to avoid your attacks.

you need more sprites. We did this by creating an interrupt that redrew the sprites in shadow form below the space ships; it was some really tricky code! The C64 version was much easier, we had more hardware sprites available that could use multiple colours and they looked much better. Maybe this is a bit too technical for some, but TV screens are drawn from top to bottom and from left to right. The Atari knew when it had finished drawing a horizontal line and would notify the code so we could do something different here. This was perfect for the sprites in *Panther*, as we used the horizontal blank to change the reference to the sprite data. It was sort of complicated to think about, but it worked great. The C64 used an 8x8 screen display so if you wanted to scroll, you would draw the screen, scroll eight lines, vertical or horizontal, redraw the screen again and then reposition it. As well as the interrupts, that's another way that the Atari system was better, you could just draw the screen and scroll it. Both machines definitely had different trade-offs and advantages over each other."

Graphics was not the only area that *Panther* excelled in, Sculptured Software also brought in legendary musician David Whittaker to provide the music and he produced what is often lauded as being one of the best 8-bit chiptunes of all-time. We will let you decide which version is the best, the C64's SID track or the Atari's POKEY rendition, but we had to ask Chuck what he thought of it. "I thought David did some great music over the years and my game was no exception. The sound was very similar on the C64 and the Atari versions too, which was great.



»[ZX Spectrum] The Speccy version features a slightly more angled view than its other 8-bit counterparts.

Honestly, though, I didn't give the music much thought. It was my job to make things work regardless of what components I was asked to work with. What a lot of people don't realise is that when you write games, you don't get the time to enjoy playing them. I listened to that music so many times, I wanted to pull my hair out! But it was a lot better than the other songs I had been forced to listen to over and over for several months, so credit where credit is due." Interestingly, Mastertronic liked the music so much that the company later reused it again for the Atari ST and Amiga shoot-'em-up *Sidewinder*, although the 16-bit renditions definitely lack the punch of their 8-bit counterparts.

Panther was released for the Atari 8-bit and C64 on both tape and disk in 1987 and proved to be a big hit. So it was inevitable that other versions would follow. Mastertronic announced that the game would be heading to the ZX Spectrum, Amstrad CPC and MSX, with all three presumably sharing the same code base. It turned to crack porting house MC Lothlorian to provide these but after a fraught development period only the ZX Spectrum version ever arrived, released some two years after the originals in 1989. All in monochrome to avoid unwanted colour clash, the Speccy version featured a reduced playing area and some redesigned graphics to make things clearer. The audio was almost non-existent too, there wasn't even music for 128k owners either, and they were to forced to make do with the same odd sound effects. It's safe to say the Spectrum version was greeted with far less fanfare than its counterparts and was quickly forgotten. Chuck himself didn't even know it existed until we showed it to him and was kinder than expected with his appraisal. "I don't have any direct experience of the Spectrum but the game looks pretty good, all things considered," he says. "The sound processor is not as powerful as the C64 or the Atari but it amazes me how these games manage to look so similar on so many different platforms." The Spectrum version aside, *Panther* is a true budget classic and one that we definitely recommend you to play. So as we load the tape for one last go we leave you with some words from Chuck to sum up his own memories. "*Panther* is definitely one of my proudest moments as a games developer, so thank you very much for this wonderful trip down memory lane".

Special thanks to Chuck Peavey.

FLIPPING CRAZY

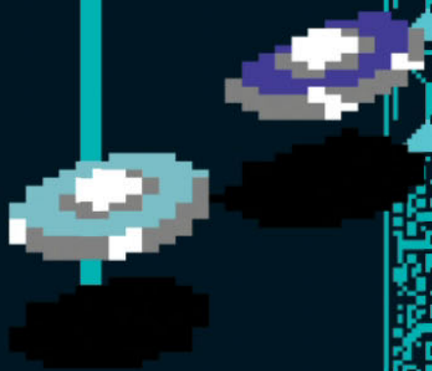
Mastertronic was the main innovator of bringing budget games to the masses, so it should come as no surprise to learn that it was always coming up with new ways to save money. One of the cleverest of these was the 'Flippy', a disk that featured the C64 version of a game on one side and the Atari 8-bit version on the other. This was primarily designed for the US market where buying games on tape was almost unheard of. Because the Atari 8-bit and C64 used the same type of 5.25-inch, disk this was a cheap and very efficient way of utilising the new double-sided disks that had come onto the market since the debut of both systems. Originally sold as single games, the company later combined some of these into 'Double Game Flippys' for even better value, such as an *LA Swat* and *Panther* pack and a casino-themed *Video Poker* and *Vegas Jackpot* compilation.

DEVELOPER HIGHLIGHTS

DARK CASTLE (PICTURED)
SYSTEM: C64
YEAR: 1987

DARK CHAMBERS
SYSTEM: Atari XE
YEAR: 1988

CHUCK NORRIS: MISSING IN ACTION
SYSTEM: Atari 7800
YEAR: 1989



Hardware Heaven

EDITOR'S CHOICE

3D Deathchase

The Spectrum's library is so diverse and expansive that it seems unfair to put one single title forward as the game you should play first. Rules are rules, though, so we're plumping for *3D Deathchase*, one of the greatest games to appear on Sir Clive Sinclair's machine.

The concept of *3D Deathchase* is simple – use your motorcycle to weave through a forest and shoot down two rivals. Shoot both down and you'll move to a night stage and the game becomes that much more difficult. While we can't be sure that everyone pretended to be riding a Speederbike through Endor like we did, we're confident you found it just as mind-blowing to play.

ZX Spectrum fact

■ The Spectrum suffered from numerous unofficial clones that were typically released in former Eastern Bloc countries, as well as the Soviet Union. Notable examples include the ATM Turbo, CIP, Tim-S, HC85 and Pentagon.

RAM: 16 OR 48K
PROCESSOR: Z80A @ 3.5 MHZ
MEDIA: CASSETTE TAPES
AUDIO: INTERNAL SPEAKER
COLOUR: EIGHT
DISPLAY MODE: 256X192

ZX Spectrum

» **MANUFACTURER:** Sinclair Research Ltd » **YEAR:** 1982 » **COST:** £125 (16KB of RAM) £175 (48KB of RAM) Today £60+

There's a reason we relaunched Retro Gamer in December 2005 with a ZX Spectrum on the cover – it's one of the most iconic home computers ever. It might not have managed to compete with the superior sales of the Commodore 64 at the time, and it was arguably more popular in the UK than it was elsewhere in the world, but its failure to crack the huge U.S. market doesn't make it any less loved by those that were lucky enough to own it.

Designed by Rick Dickinson, the ZX Spectrum was the natural evolution of Sinclair's earlier ZX81, offering more memory, more power and more… Well, more of everything really. Its low price point made it instantly attractive to the average consumer that Sinclair was targeting, while the computer's clever BASIC keywords made it extremely popular with budding bedroom coders. Yes, it was cheap and cheerful, but the possibilities offered when your fingers connected with that delicate rubber membrane suggested a world of possibilities beyond what was capable with Sinclair's earlier computers. In short it felt like a revolution and many famous coders went on to create their first games on the system. It's quite simply one of the best-loved machines of its era.

METROID

SAMUS'

Planet Earth, 1986. Bounty hunter Samus Aran touches down for the first time, bringing with her a tale of adventure on an alien world. Little did she know just how much this debut would go on to impact the three decades of gaming that followed...

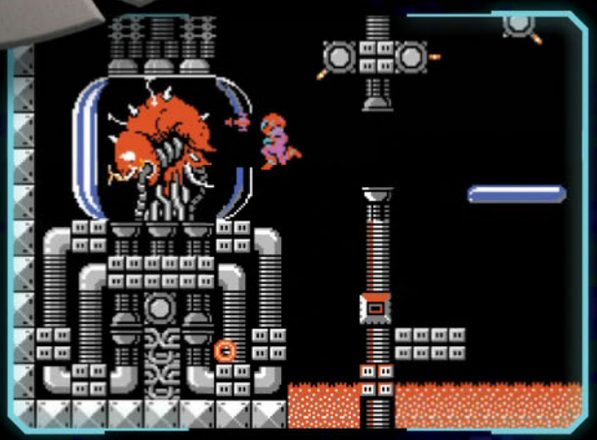
As useful as it may be, there are plenty of reasons not to like the 'Metroidvania' moniker that has been widely adopted to describe games that fuse exploration, platforming and combat. Not only is it a bit of a mouthful, it also feels a little disrespectful to the games that originally laid the groundwork *Metroid* and *Castlevania* would later build on and those excellent examples of the emergent subgenre that have come along since – grating in the same way as hearing someone clueless describe any games console as 'a Nintendo', it's an oversimplification, and a potentially misleading one at that. To offer another example, it's a bit like when all FPS games in the early-to-mid Nineties were called '*Doom* clones' – it's not done out of disrespect, rather convenience and transparency, a term to quickly and easily convey an experience which may otherwise be quite tricky to accurately describe.

» [NES] The original *Metroid* is know for being uncompromisingly difficult, with enemies taking a large chunk of Samus' energy upon contact.

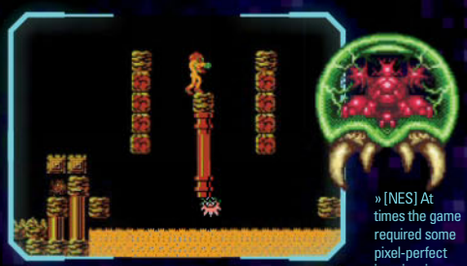
"Being able to communicate what your game is all about with a single word is a huge benefit for your marketing efforts," says Olle Håkansson, creative lead at Image & Form, working on games like *SteamWorld Dig*, which clearly draws a little inspiration from the exploits of one Samus Aran. That said, the team's follow-up game wouldn't find quite so convenient a label. "We're still working on how to sell *SteamWorld Heist* – a great game that defies all attempts at simple explanations," he explains, but what's so hard about explaining a procedural 2D *XCOM*-like game with multiple classes that all fundamentally change how each mission is tackled? Oh. Right. That's more than one word. Divisive as it may be, that label clearly serves a purpose.

In truth, if there absolutely *has* to be a buzzword used to describe similar games, it's probably only fair

ROID LEGACY



» [NES] Fighting Mother Brain alone is a defining moment, what comes after however, is more exciting…



» [NES] At times the game required some pixel-perfect jumping, in order to avoid death by lava or worse.

» [Game Boy] Although Metroids were limited to one area in the original, you had to search far and wide to hunt them in its sequel.

that *Metroid* be name-checked in it. While there were certainly earlier examples of open-plan game design, it was Samus' debut that finally managed to use it to capture the imagination of a generation. While its NES peers were predominantly jolly, colourful affairs designed to be as accessible as possible, *Metroid* went against the grain to deliver a bleak and lonely experience, one that demanded intricate knowledge of its sometimes obtuse systems and mechanics without ever feeling the need to furnish players with such luxuries as map waypoints or equipment details. Punishing as it may have been, learning the hard way brings with it a degree of job satisfaction that we as players in recent years would somehow grow (or be conditioned) to ignore, hence the popularity boom of the *Souls* games today – while the lack of handholding in FromSoftware's games is certainly welcome amid the sea of 'press X to videogame' titles out there, *Metroid* and games carved in its likeness have been offering that same level of challenge and mystery for three whole decades. It's nothing new... it just *feels* like it is due to how much most modern games want to take your jacket, offer you a glass of warm Cava and lead you safely yet infuriatingly-slowly to the credits. Nothing has changed, and the elements that helped *Metroid* feel so fresh and novel on release – its non-pandering nature and love of dumping players into a hostile and challenging environment – feel every bit as liberating and energising as they did 30 years ago, whatever game they are presented in.

This brings us nicely around to the second half of the du jour portmanteau - '-vania'. Many assume this part of the name to be referring to the way *Symphony Of The Night* turned the classic 16-bit *Castlevania* side-scrollers into something meatier and more involving, but the seeds were planted far earlier. While the arcade action of the original NES release was what most sequels ran with, *Castlevania II: Simon's Quest*

SPEEDRUNS

■ While designed to have players get lost in their weird alien worlds, *Metroid* games are packed with mechanics and designed areas that mean experts can cut completion times by a matter of hours. Using data from howlongtobeat.com and the current records at speedrun.com (where optimised routes and perfect performance are key to smashing records), we aim to show you just how much quicker you could be finishing *Metroid* games.

METROID
NES, 1986

Average Completion Time:
7.5h
Record Completion Time:
11m58s
Average 100% Time:
9h
Record 100% Time:
45m18s

SUPER METROID
SNES, 1994

Average Completion Time:
7.5h

Record Completion Time:
34m*

Average 100% Time:
9h

Record 100% Time:
48m*

* data from speeddemosarchive.com

▶ was a completely different beast – its non-linear structure, RPG influences and open map would all help form the basis of the modern Metroidvania template, even if the translation may not have done it justice and made matters overly cryptic or obtuse. This additional language barrier made this first open *Castlevania* feel a little obnoxious or overly cruel, but *SOTN*'s localisation – cheesy dialogue and all – ironed out the kinks in that original template and delivered a game that can certainly be said to have stolen peoples' souls and made them its slaves. And *Metroid,* too, would evolve through sequels, if perhaps not where you would have maybe expected.

The first *Metroid* I ever played was *Metroid II* on the Game Boy," recalls Devin Monnens, website director of metroid-database.com – the leading fansite for the franchise. "I remember going into the living room while my brother was playing it on the Super Game Boy. The lights were turned down low, and he had on the black background and was exploring the maze beneath Ruins Area 3 with the Varia Suit with the Spazer, neither of which I had collected yet, and those items made Samus look like a badass. So here's this powerful character blasting her way through a foreboding landscape in the dark. There's just something about that atmosphere that really cemented *Metroid* in my psyche, and I became a lifelong fan at that moment." The Game Boy sequel doesn't typically get all that much love, and that's not fair. It gave us the larger, more open maps that later games would go on to be defined by, not to mention defining the design of the Varia Suit as we know and love it today – while colour variants were fine in the NES original, the monochrome visuals of the Game Boy meant that more visible signs were needed when a suit upgrade took place, hence the rounded shoulders of Samus' iconic suit that we all more or less take for granted today.

» [SNES] The game throws hints at you to point you in the right direction, like this ominous-looking statue.

> "Our first experience with this masterpiece of a game was to defeat the final boss"
> Olle Håkansson

Musicians often speak of the 'difficult third album', but *Super Metroid* might just be the best difficult third album ever recorded. Visually, structurally, mechanically... it's not easy to drop the 'P Bomb', but it's effectively perfect – something that can't even be spoiled by the greatest spoiler of all, apparently. "My brother came home one day with a used copy of *Super Metroid.* We had barely heard about the game, and didn't really know what to expect," Olle recalls. "Without knowing it, we continued on the previous owner's save file, starting right at the end of the game. So our first experience with this masterpiece of a game was to defeat the final boss and see the ending credits roll past. Interestingly, this didn't really spoil the game for us. We realised our mistake and started the game from the beginning, knowing about all these cool upgrades and abilities

CHOZO YOUR OWN ADVENTURE

The best games that Metroid and Castlevania spawned

WONDER BOY III: THE DRAGON'S TRAP
MASTER SYSTEM, 1989

■ A example of a traditional side-scroller that upped its game with non-linear design. Here, the various transformations each have their own abilities, meaning exploration is key to getting to those out-of-reach areas. A superb game – and one of the most ambitious of the 8-bit era.

SHADOW COMPLEX
XBOX 360, 2009

■ Despite using the 2.5D visuals, *Shadow Complex* plays around more with 3D space than its side-on peers – enemies in the background can be attacked and return fire, making every encounter exciting. Progress is locked behind ingenious tools, including an awesome gun that fires solidifying foam to create platforms.

BATMAN: ARKHAM ASYLUM
MULTI, 2009

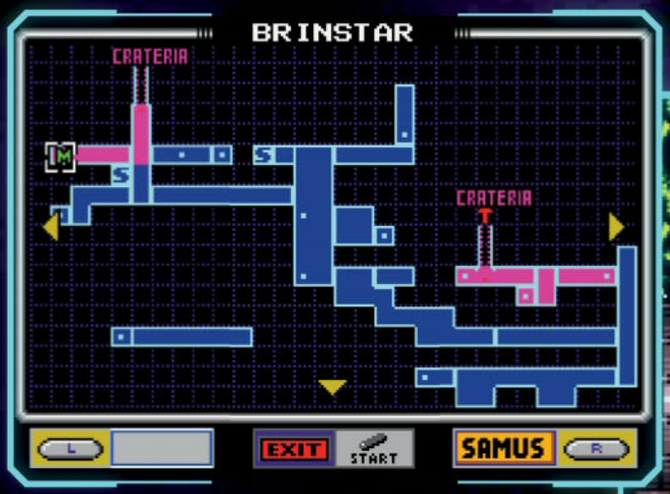
■ After years of terrible 3D *Batman* games, Rocksteady came along and created one of the most successful licensed games series. *Asylum*, like *Metroid Prime* before it, presents an awesome 3D playground, with numerous upgrades and tools that open up more and more of the area.

AXIOM VERGE
MULTI, 2015

■ Those who like to make sweeping statements might like to call *Axiom Verge* the best *Metroid* game in the last decade, and in honesty we'd struggle to argue with them. Despite being a one-man project, this nails the atmosphere that makes *Metroid* so special and its upgrades are empowering and creative.

ORI AND THE BLIND FOREST
MULTI, 2015

■ In equal parts beautiful, heartbreaking and challenging, *Ori* is among the best examples of modern *Metroid*-inspired design. Controls are tight and while mastering the unique mechanics of moves like Bash isn't easy, the entire adventure is one that you're never likely to forget.



» [SNES] The Kraid boss fight of *Super Metroid* is a highlight, so much so that it's copied for *Zero Mission*.

we'd eventually get, but we didn't know the whens and hows. I think our false start actually improved the experience for us, giving us a taste of what to expect. While we understood the concept of Shinesparking from observing the ostrich creatures, we never learned how to do wall-jumping back then. My second fondest memory is getting pulled back to the game years later, realising that there's yet another fundamental movement technique that allows for all sorts of sequence breaks and mischief. I've yet to play a game with as much depth as *Super Metroid*."

That 'false start' would go on to be a series staple, an early taste of Samus' full potential right off the bat before it's stripped away and you need to replace each tool in turn to get back to that sensation of true power. It's a stunt *Symphony Of The Night* pulled to an even more extreme degree, in fact – Death, none too pleased with Alucard's intentions of doing in the Lord Of Darkness, strips him of the overpowered weapons and armour he starts the game in and kicks off a gradual gear grind akin to a more traditional RPG. On top of this, relics layer on new mechanics and tools gradually, but it's the slow burn of unlocking these extra abilities that really gives you a chance to master them. Unlock them for real and reach the end and you'll be unstoppable, which is when you think back to those early stages and realise just how little use you actually made of your character's full potential and yet *still* felt awesome.

Devin accurately points out that this gradual accrual of power to facilitate further exploration is far from unique in the wider spectrum of gaming. "With a Metroidvania, the mechanics of 'find this item, and now you can access this new area' are essentially the same as *Zelda*, except it's side-scrolling: gravity and jumping are central to the gameplay, but absent from *Zelda*," he reasons. "*Metroid* focuses primarily on movement through vertical space – gravity and jumping. This is coupled with spatial navigational skills – being able to ▶

METROID II: RETURN OF SAMUS

GAME BOY, 1991

Average Completion Time: 4h

Record Completion Time: 57m42s

Average 100% Time: 5.5h

Record 100% Time: 59m

MAKING A METROIDVANIA

DrinkBox Studios' David Rusak talks about how the genre lives on

What are your earliest or fondest memories of the *Metroid* series?
For me personally, *Super Metroid* is the biggest touchstone of the series from my childhood. The cinematic presentation of this game was just incredibly impressive for its time – and it starts off with such a bang. The opening section on the attacked ship and the final Mother Brain fight both stick out as vivid memories. Even today, the atmosphere, music and staging of this game make it so much easier to take seriously right off the bat than almost anything from the era.

What do you think was the franchise's most important contribution to gaming?
The game format is the obvious thing to pick here. Seeding the gaming universe with such a wicked female hero so is also definitely notable. I'm sure the series has contributed more innovations that I'm not even aware of.

There are clearly some big fans of *Metroid* over at DrinkBox Studios – what's your take on the more recent 3D *Metroid* games?
To me the *Metroid Prime* games are a shining example of the classic Nintendo trend of publishing ridiculously novel sequels to already-awesome franchises. The *Prime* games have really different gameplay strengths and weaknesses from the 2D games, but they preserve and maybe even improve on that core feeling of super-engrossing, solitary exploration. Fumbling with recreating that feeling, and with the narrative in general, was exactly where *Other M* really lost me personally – despite doing some interesting and novel gameplay stuff with characteristic Team Ninja slickness. In general, though, seeing Samus' character switch from an inscrutable, hulking suit of space armour to sexy high-heeled space-lycra in more and more media kinda bums me out.

***Metroid*'s influence is evident in *Guacamelee!*, but do you think it permeates your other projects as well?**
Our new game, *Severed*, definitely takes game structure cues from the 'Metroidvania' format as well, with inaccessible areas that you later realise you can come back to. And we have a silent protagonist determinedly finding her way through a spooky, alien environment, with explicit storytelling by and large trying to stay out of your way – I think there are a lot of atmosphere notes that *Severed* has in common with the *Metroid* series.

Are there any aspects of or areas in *Guacamelee* (besides the Choozo statues) that pay direct homage to *Metroid*?
There are also a few statues in the Forest del Chivo that look suspiciously like the titular alien itself... Honestly, we already felt like we were really pushing our luck with the Choozos!

Why do you think Metroidvanias are so popular among modern indie developers?
On the superficial level, it's definitely been, and maybe continues to be, a key word that readily gets people's interest. But I think there's good reason for that. As a player, I find a lot of explicit game narratives I encounter forgettable, and also find myself more or less forgetting the many beautifully-crafted game worlds that I'm often dragged through to let those narratives unfold. A format of game that instead invites/forces you to familiarise yourself with its places, to get lost, probe around for secrets, and revisit with new abilities, lets you get really involved with its world in a totally different way from those on-railsiest of game plots. Designing for this kind of freedom has plenty of its own challenges, and it's all for naught if you don't make it fun to spend all that time there – but I think there's still heaps of new things to be tried in this space, and I can't wait to play them!

SUIT UP

Samus' ever-improving loadout and how it assists in scaling new heights

BEAM

■ Samus' arm cannon is a versatile tool, with numerous upgrades made available over the course of her many missions. The basic form is the Power Beam, capable of firing energy blasts rapidly and the most basic upgrade to this is the Charge Beam, allowing her to store up power before unleashing one big powerful blast. Other recurring upgrades include the Plasma Beam – which fires potent beams that penetrate enemies, except in *Prime* where it's a short-range heat-based beam – the enemy-freezing Ice Beam and the Wave Beam, which can pass through certain walls.

MISSILE LAUNCHER

■ We said that Samus' arm cannon was a versatile piece of kit, and we weren't kidding – it also doubles as a rocket launcher, vital for dealing with armoured enemies or door locks. Missile ammo is finite and must be topped up with ammo drops from enemies or charging stations, while Missile Expansions are typically the most common form of collectible. This launcher, like the Power Beam, is upgradeable as well, with more powerful Super Missiles available in pretty much all of the games and a few less common upgrades, such as Seeker Missiles.

OTHER

■ Not all of Samus' upgrades can be categorised easily, but that doesn't make them any less useful. Health Tanks are up there with Missile Expansions as the most common collectibles. Then there's the Speed Booster, which lets Samus turn into a speeding juggernaut after running in a fixed direction for a few seconds. This in turn allows the Shinespark to be performed, a directional leap that retains the momentum of the dash. Finally, each *Metroid* game tends to have a few of its own unique upgrades too, whether it's the additional Visors found in the *Prime* games or the melee-focused moves and abilities found in *Other M*.

SUIT

■ While she usually starts in a basic Power Suit, Samus tends to get several crucial upgrades over the course of each mission. The most common of these is the Varia Suit, offering increased resistance to damage and extreme temperatures. Other suit upgrades tend to vary from game to game – the Gravity Suit is perhaps the most common behind the Varia, with the Fusion Suit coming to the fore in the first GBA game and several Phazon-based ones appearing in the *Prime* trilogy. There's also the Zero Suit, the basic jumpsuit worn beneath the various armoured suits.

MORPH BALL

■ This ability usually appears early in a *Metroid* adventure, since it's essential for exploration in lieu of the ability to crouch or crawl. While it looks like it must be uncomfortable and disorienting, being able to roll up into a ball and enter gaps is crucial to success. With the right upgrades, Samus can also deploy ordnance in the form of Morph Ball Bombs and Power Bombs, useful for dealing with small threats without morphing back to normal, powering up certain sockets and even granting additional mobility – with correct time and placement, standard Morph Ball Bombs can be used to propel Samus skywards, sometimes leading to shortcuts and sequence breaks that only skilled players will be able to reach.

BOOTS

■ Given the series' emphasis on vertical exploration, it's hardly surprising that Samus gets various enhancements that improve her jumping ability, as well as the ability to kick off of walls. Like all of her other power-ups, these come in multiple flavours – the High Jump Boots grant greater height for her basic leap, while the Space Jump Boots enable that perennial videogame favourite, the physics-mocking double jump. This can be upgraded again to further spit in the face of science with the Screw Attack, with which Samus can use to stay airborne for extended periods with multiple jumps, all the while immune to most damage and ripping through any enemies that stand in her way.

» [GBA] Fighting a boss usually meant that a new upgrade to your arsenal was just around the corner.

» [GBA] Upon defeating a boss monster in *Fusion*, you had to then fight the X Parasite hiding within.

> "You cannot have a Metroidvania without that vertical movement"
>
> Devin Monnens

▶ find your way around the map. I don't think you can have a Metroidvania without that vertical movement. Combat, if present, can be ranged or close quarters, but typically involves manoeuvring vertically around the enemy (as opposed to say *Mega Man* or *Contra*, which are largely horizontal)." Compare the maps from, for argument's sake, *A Link To The Past* and *Super Metroid* and you'll see similarly large 2D play spaces with all the expected barriers where new skills or items are needed to progress, but this just highlight a crucial difference – as Devin says, gravity is a key factor in *Metroid* or any similar game. The top-down view of those classic *Zelda* games means that Link can effectively fly around the screen, while a side-on perspective gives an additional layer to deal with on a gameplay level, often involving feats of skill and timing that you seldom see in other examples of gated game design.

It's for this reason that the first full-3D *Metroid* game, *Prime*, was initially met with an air of caution. Adding *another* layer of complexity could have easily made matters overly confusing and lost a lot of what made the series great, with the fact that Nintendo had previously gone a whole generation without a new *Metroid* game seemingly cementing the notion that the model wasn't viable in 3D. Indeed, series cocreator Yoshio Sakamoto has since come out and confirmed that the team struggled with the transition to 3D. "I felt that I shouldn't be the one making the game," he explained in an interview with *games™* several years ago. "When I held the N64 controller in my hands, I just couldn't imagine how it could be used to move Samus around. So for me, it was just too early to personally make a 3D *Metroid* at that time." He went on to reveal that Nintendo even approached an external developer (who, sadly, he would not name specifically) to tackle a 3D *Metroid* for the N64, but they too declined due to a lack of confidence in being able to create something that would compare favourably to *Super Metroid*.

» [GBA] *Zero Mission* was effectively a full remake of the original game, detailing Samus' first adventure in greater detail.

While the identity of that mystery studio will likely be a secret that only those involved are ever privy to, the power of hindsight gives us reasonable grounds on which to speculate. We'd suggest that it could have been Iguana Entertainment, early front-runners in 3D gaming on the N64 with *Turok*, a series which, alongside Rare's work, would define the FPS experience for that console generation – a perfect fit for a 3D *Metroid* at the time, surely? The plot thickens, too. Iguana founder Jeff Spangenberg would go on to form Retro Studios with the help of Nintendo and some former Iguana colleagues, with the new studio originally having four early GameCube games in development before resources were shifted towards retooling one, which went by the rudimentary working title of *Action Adventure*, to be a new *Metroid* game, *Metroid* ▶

METROID FUSION

GBA, 2002

Average Completion Time: 5h
Record Completion Time: 45m
Average 100% Time: 7.5h
Record 100% Time: 1h4m

METROID PRIME

GAMECUBE, 2002

Average Completion Time: 13h
Record Completion Time: 53m
Average 100% Time: 19h
Record 100% Time: 1h13m

SEQUENCE BREAKS

Because doing things in correct order is for chumps

METROID PRIME

DOUBLING DOWN ON MOBILITY

■ Samus' first 3D outing is initially stingy when it comes to movement upgrades, although that can be addressed seconds after touching down on Tallon IV. By using a trick that involves performing what is known as a 'dash jump' from the top of Samus' ship while locked onto an object, it's possible to reach the nearby ledge to grab the Space Jump Boots early and start double-jumping way sooner than you'd otherwise be able to. This, in turn, allows early access to a Missile Expansion before you even get the launcher.

DARK SOULS

BLIGHTTOWN BACK DOOR

■ Ask anyone and they'll tell you that Blighttown is not only the worst area in the original *Dark Souls* but one of the most frustrating locations in gaming history. It's dark, horribly designed and plagued with enemies that can poison you, so skipping it is always going to be preferable. There are a number of ways to do this – taking the Master Key as your 'gift' when creating a character is the easiest one, allowing several areas and bosses to be avoided entirely to enter Blighttown's easier route via the Valley Of The Drakes.

CASTLEVANIA: SYMPHONY OF THE NIGHT

CHEATING DEATH

■ While there are loads of glitches and tricks that can be used to explore the castle more freely than the developers expected, this is perhaps the most novel. Remember how Death shows up near the start and steals your powerful gear? Yeah, you can skip that and keep your equipment – taking a hit that deals damage greater than half max HP will send Alucard flying at extreme speed until he hits a wall, which can be exploited on the Wargs in the hallway to soar past the room where Death's little visit would usually take place without letting him rob you.

SUPER MARIO WORLD

STAR ROAD SHORTCUT

■ While not a Metroidvania game, the classic platformer still has elements that are intended to be used on later return visits to early levels. With good execution, it's possible to exit Donut Plains 1 via the secret exit, which would usually only be accessible after clearing the Green Switch Palace – using the Cape, it's possible to reach the hidden area near the end of the level to reach Donut Secret 1, which in turn leads to Donut Secret House and then Star Road. Doing this, you can skip the majority of the game.

THE LEGEND OF ZELDA: OCARINA OF TIME

A LINK TO WHEREVER

■ Considering its status as one of the all-time greats, *Ocarina Of Time* is surprisingly broken. Countless glitches and tricks have been discovered over the years that let you do everything from taking Young Link into late dungeons to inventory manipulation that lets you do silly things like playing bombs as if they were Link's ocarina. Using any combination of these tricks, it's possible to skip large sections of the game or tackle dungeons in pretty much any order you like, making this title a hotly-contested challenge for speedrunners.

» [GBA] In *Zero Mission*, if you fully charge your beam and perform a somersault, you can damage your enemies similarly to your Screw Attack.

▶ *Prime*, while cancelling the other three titles. Could it be that the ex-Iguana guys finally cracked the code several years down the line? It would certainly explain the working title – nothing screams 'we want this game to belong to a particular franchise but it can't currently for legal reasons' quite like not bothering to come up with a moniker that is more than just the name of the game's genre. Food for thought, certainly, especially since we'll likely never know for sure.

What we *do* know for sure, however, is that Retro absolutely smashed it with *Prime*. Minor sacrifices were made in terms of verticality but everything else – from tone, to sense of isolation, to wonder of exploration – was spot-on. Seeing this alien world through Samus' visor for the first time was incredible and with the camera pulling back to a third-person angle during Morph Ball transformations, it even managed to retain a lot of the classic game design while transitioning into 3D space. "I think they did a really good job, perhaps even better than the 2D efforts," says Thomas Happ, creator of *Axiom Verge*, widely celebrated as the best new *Metroid* game in years even though it isn't even part of the series. "The only thing I might ask further would be to find a solution to the 'glowing objects are the only important ones' problem with the visor. The environments are so amazingly well-crafted that it's kind of a shame when you start scanning and realise most of it is just empty collision geometry with no function. This doesn't seem to be an issue in 2D but seems necessary in 3D." A valid point, for sure, but Devin is once again on hand to drop truth bombs (we assume he had to roll into a ball first in order to do this).

» [GameCube] Like *Mario 64*, *Metroid Prime* transitioned the series into the third dimension effortlessly..

"3D changes how players navigate space," he explains. "As a designer, you have to consider what the player is able to see from any given vantage point, and you also have to figure out how they will navigate platforms. With *Metroid Prime*, the game is also in first-person, so the player sees through the eyes of Samus. This not only affects the game's combat (dashing and circling an enemy versus jumping around it to shoot from different angles) but also immerses the player inside the suit. You don't get a sense of how visually cool Samus is while walking around and it's harder to get a wider range of combat in first-person, but you can get a better sense of how the world looks." It's a trade-off, then – one that sacrifices the visual design of the now-iconic heroine in order to deliver a better sense of place and that reworks combat to work on a horizontal 2D plane rather than a vertical one for the most part.

So strong was Retro's take on the formula that we went from having a generation with no *Metroid* games straight into one with three – *Prime* became a trilogy before Nintendo looked to shake things up on Wii by having *Ninja Gaiden* developer Team Ninja deliver its interpretation. While combat was superb (par for the course for the well-versed team) and exploration still felt good with a third-person 3D viewpoint, *Other M* was let down by its portrayal of Samus. Having always been a strong female lead, here she came across weak and reliant on others – a shortcoming that perhaps should have been expected from the *Dead Or Alive* team, to whom 'fleshing out' a character clearly has a very different meaning to that of the rest of the industry. Nevertheless, *Prime*'s influence lives on and often in the most unexpected places. Rocksteady's superb *Batman* games use much the same system of gated progression, for instance, *Arkham Asylum* particularly due to its confined play space and setting.

» [Wii] Certain areas of *Metroid: Other M* required you to switch between first and third-person perspectives to locate useful items and fight enemies.

> "The new Tomb Raider games are Metroidvanias, as was Arkham Asylum"
> Thomas Happ

But while *Prime*'s influence can be *traced*, the 2D *Metroid* template can't be avoided today. It's a staple of many an indie title, from *Ori And The Blind Forest* to *Shadow Complex*, and with good reason. "I think it's a good game design," says Thomas. "Remember when every open world game was compared to *GTA*? But it's just a good way to design a lot of different games. Same thing for Metroidvanias. The new *Tomb Raider* games are Metroidvanias, as was *Arkham Asylum*, just you don't hear them described like that because they're not 2D side-scrollers." Olle agrees. "It's a great recipe that gives a lot of good gameplay for relatively small amounts of work," he tells us. "I'm not saying that building Metroidvanias is simple, but a good foundation gives you a leverage effect from how much work you have to put in versus the amount of fun you get out of it."

However you feel about the transition of the *Metroid* or *Castlevania* series into 3D, the truth is that triple-A 3D titles from those franchises do nothing to devalue the games that helped coin the Metroidvania moniker, nor do they take anything away from the smaller modern games that wear it proudly. "I can't imagine wanting to make the same game over and over again, just with new artwork," closes Thomas. "But the basic design – encountering obstacles that you can overcome by exploring to find new abilities – is just a good one. I don't think it'll ever go out of style." ✱

METROID: ZERO MISSION

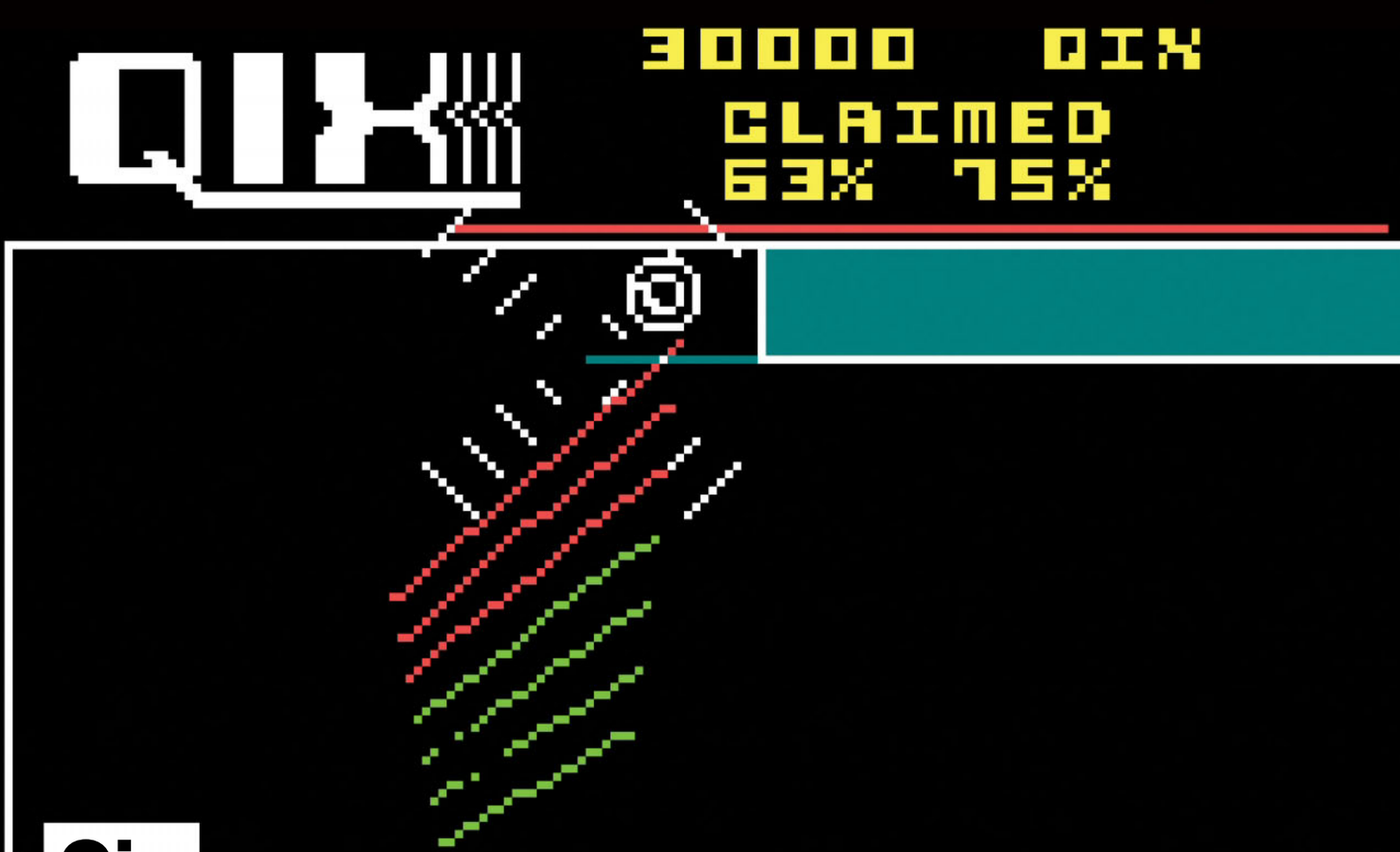
GBA, 2004

Average Completion Time:
4h

Record Completion Time:
26m19s

Average 100% Time:
6h

Record 100% Time:
50m15s



Qix

DRAWING LINES HAS NEVER BEEN SO MUCH FUN

» RETROREVIVAL

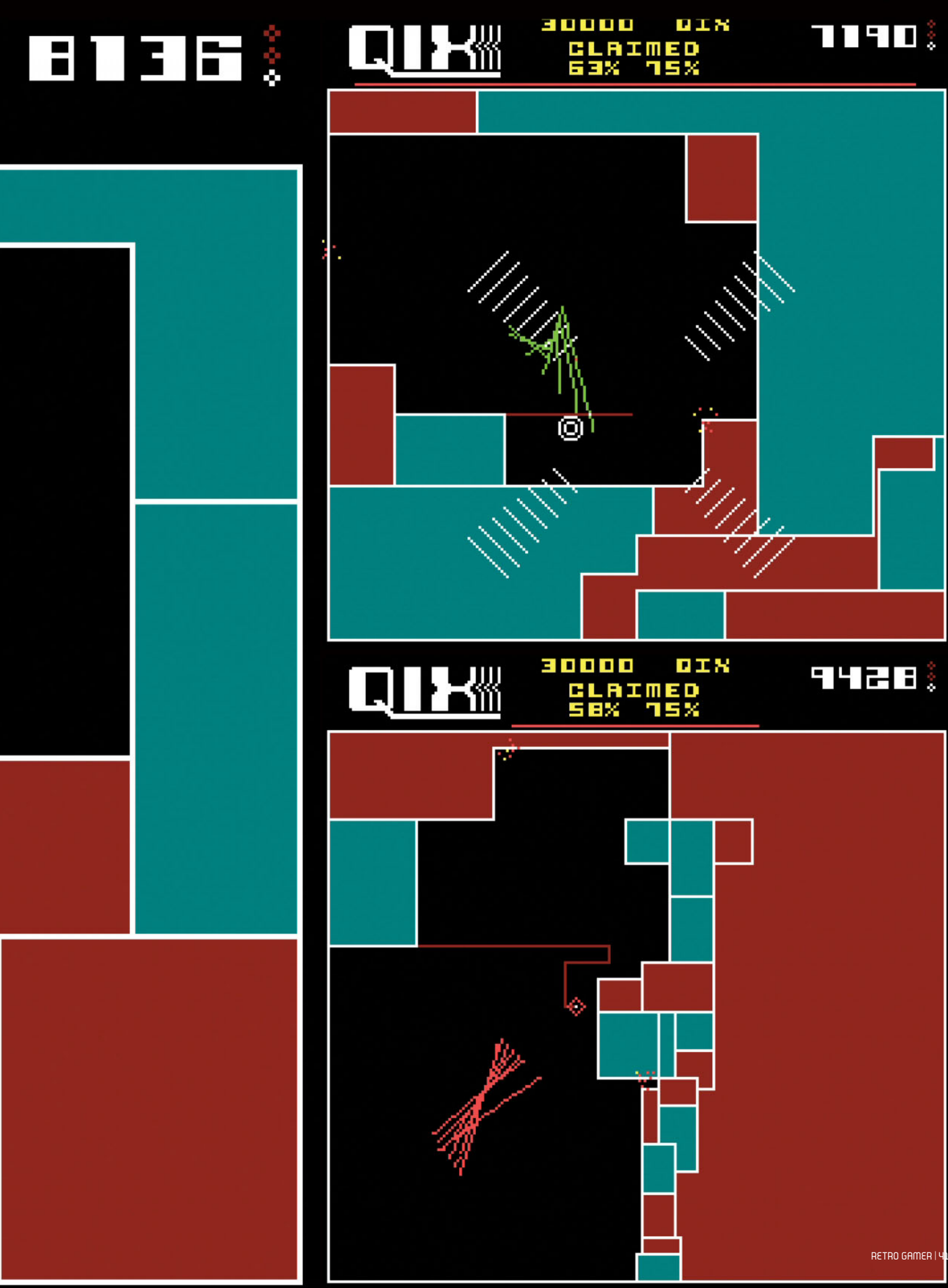
» **ARCADE** » **TAITO** » **1981**

Qix is apparently pronounced 'kicks', but I've always said 'quix' which is probably why I get blank or confused looks from people whenever I discuss Taito's game with them.

I first encountered *Qix* back in 1982 when I was visiting the annual fair that made camp in Boscombe's Queen's Park. My Nan had given me 50p to last me the entire evening, and I, of course, spent it solely on arcade games, rather than saving it for the actual fairground attractions, like my more sensible sister.

While it lacked the sheer visual pull of games like *Donkey Kong*, *Pac-Man* and *Galaga*, I kept on finding myself drawn to that *Qix* machine, enthralled by the abstract shapes that were being created and wondering why everyone playing it was swearing so much. After placing a coin in the slot and having a go myself, I quickly realised why the air had been turning so blue…

The beauty of *Qix* is its scoring system. You're presented with a single blank screen and must fill a specific portion of that screen in before you can move to the next. Come into contact with the eponymous Qix while you're drawing a line, or let it hit the trail left behind you and you're dead. Conversely, get hit by one of the monsters patrolling the outer playfields and you're also toast. It should be easy, but your constant desire to fill more of the screen (which will earn additional bonus points on completion) inevitably causes you to overstretch, which ultimately leads to your demise. Needless to say, on that cold November evening, I said a few swears of my own… ✱


8136
QIX
30000 DIX
CLAIMED
63% 75%
7190
QIX
30000 DIX
CLAIMED
58% 75%
9428

PLAY RETRO TODAY

Nick Thorpe and Darran Jones reveal the many ways that you can experience the classics of yesteryear - from the latest plug-and-play devices, to official download services and getting a great image on your new TV

Retro gaming has become a popular hobby over the years, but it hasn't become any easier to get into. Used game prices have climbed dramatically, and advances in TV technology have, ironically, made it harder to get a great picture from old consoles.

Luckily, this popularity also means that an industry has grown around offering new devices to enhance your experience with old games. Whether you want a collection of classics on the cheap, a way to take your favourite games on the road, or something that'll let you back up your cartridge saves, there's a device out there for you. We look at a selection of the kit on offer, and talk to the people behind the devices.

PLUG-AND-PLAY CONSOLES

Whether you're a complete newcomer to a format, or you just want to try some older games, these consoles can offer a cheap way to experience retro classics

NINTENDO CLASSIC MINI: NES

INFORMATION

- **MANUFACTURER:** Nintendo
- **PRICE:** £49.99
- **WEBSITE:** www.nintendo.co.uk
- **RETAILER:** www.nintendo.co.uk

Nintendo's first entry into the plug-and-play market has been hotly anticipated since it was announced, and initial shipments sold out very quickly. You can turn to page 98 to see our full verdict on the system, but it's not exactly a spoiler to say that it's a pretty impressive piece of kit.

The Nintendo Classic Mini: NES consists of a miniature NES replica, with two Wii-standard connection ports for controllers, a HDMI connector and a micro USB port for power. We were able to power the device successfully straight from our TV's USB port, but we played at a desk – this won't be an option for a lot of you!

The device contains 30 built-in games chosen to give a good introduction to the console – you'll get both single-player and multiplayer games across a variety of genres, and, crucially, a good number of third-party hits have made the list. Better yet, all games run at 60Hz, a blessing for those of us who had to put up with poor PAL conversions as kids. Emulation accuracy is high, with even the faults of the NES given their due – you'll see plenty of classic sprite flicker.

The Nintendo Classic Mini offers a couple of enhancement features. The first of these is a choice of three screen modes – regular 4:3, Pixel Perfect (a narrower look, familiar to emulation fans) and a CRT filter. The CRT filter adds scanlines and a little bit of RF-style distortion for a rather authentic look. The other one is the addition of 'suspend points' – essentially save states, which can be created at any point in the game simply by pressing the reset button. Up to four states can be saved per game.

The Nintendo Classic Mini: NES is very good, but it's not perfect. It offers fewer games than many of its competitors and no way to expand upon the existing library. Additionally, the lack of NES control ports means that you'll have to do without any of your favourite classic peripherals. Having to press reset to change games or save is a bugbear too, albeit a minor one as the short controller cables mean you'll always be situated close to the machine. Having said all that, Nintendo's debut effort is one of the best plug-and-play machines out there for build quality and authenticity, so it's a great way to experience a strong library on the cheap.

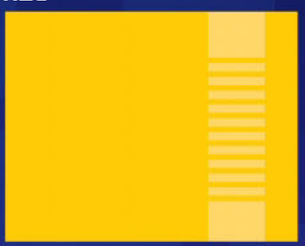
» [NES Mini] Both *The Legend Of Zelda* and its divisive sequel are available to play.

» [NES Mini] Nintendo's system allows for a CRT filter for added authenticity.

» You'll have to purchase a second controller if you want to play multiplayer.

JUST HOW MINI IS IT?

NES



256 x 201 x 86mm

NES CARTRIDGE

140 x 104 x 16mm

NES MINI

126 x 99 x 42mm

PLUG AND PLAY CONSOLES

ATARI FLASHBACK 7 AND FLASHBACK PORTABLE

» **MANUFACTURER:** AtGames » **PRICE:** £49.99
» **WEBSITE:** www.atgames.us
» **RETAILER:** www.funstockretro.co.uk

The long-running Atari Flashback series adds *Frogger* to its roster this year, and it offers both good emulation and a long list of great games.

The Atari Flashback 7 offers 101 built-in games and supports original controllers, while the Atari Flashback Portable offers 60 games and offers the opportunity to add more via SD card.

FLASHING BACK TO THE FUTURE

AtGames' Ray Attiyat speaks to us about its long-running product ranges

Q&A

Why did you focus on the Mega Drive and Atari 2600?

Sega and Atari are two of the most beloved names in retro gaming, so it seemed like an obvious choice to partner with those two companies. Of course, we've also partnered with, and continue to partner with, many other amazing companies to bring some of the best retro gaming products to market.

Why do you think these devices are so popular with gamers?

A lot of it is the timeless value of these games that entice a broad demographic and connect generations of players. These are the classics people played when they were younger, and they now play with their children and grandchildren. Additionally, blogs, streams, and other social media outlets put a lot of focus on retro gaming, which helps introduce new players to these games and help former players reconnect. All of that and more helps keep our Flashback products consistently popular.

Why do the devices occasionally come with SD card compatibility?

We're always evaluating new features. In fact, our Sega and Atari Flashback Portables have an SD card slot for those gamers who are looking for that type of option.

RETRO-BIT GENERATIONS

INFORMATION

» **MANUFACTURER:** Retro-Bit
» **PRICE:** $59.99 (UK TBD)
» **WEBSITE:** www.retro-bit.com
» **RETAILER:** www.amazon.com

Rather than concentrating on a single format, franchise or company, Retro-Bit's debut plug-and-play console offers a range of games licensed from publishers including Capcom, Data East, Irem, Jaleco and Piko Interactive. The unit comes with Mega Drive-style, six-button USB controllers and offers both composite and HDMI output, as well as game saves on internal memory and SD card.

The range of games on the Retro-Bit generations includes over 100 arcade, NES, SNES, Game Boy and Mega Drive releases. There are definitely some strong titles included – *R-Type III: The Third Lightning*, *Super Ghouls 'N Ghosts* and *Rod Land* are amongst the highlights for us.

» [Retro-Bit Generations] The console's user interface looks particularly easy to navigate.

Unfortunately, we have not yet had an opportunity to try the Retro-Bit Generations console yet as it was released just as we were putting the finishing touches to this issue, but rest assured we will let you know the pros and cons as soon as we have a chance to try the machine.

BREAKING NEW (OLD) GROUND

Richard Igros and Kris Mendez gives us a behind-the-scenes look at Retro-Bit's first foray into the plug-and-play market

Q&A

Retro-Bit has largely been making accessories and clone hardware. Now it has ventured into the plug-and-play area – why start this new approach?

KM: Since 2007, Retro-Bit has focused on providing the gaming community access to their original cartridge collections, but we also wanted to consider those that didn't originally have access to these games or perhaps didn't grow up with them. We wanted to take some of the legwork out of hunting down some of these great games and compile a lot of classics onto one system, so they spend more time enjoying them.

Retro-Bit Generations is a bit different in that most plug-and-play systems focus on a single company or console, but you've drawn licenses from Capcom, Data East, Irem, Jaleco and Piko Interactive. Why did you choose this approach?

KM: The great thing about being in this industry is that it's not just about playing just one console or publisher – we like to involve ourselves with multiple games, and multiple consoles. It's less appealing to devote the console to one gaming library, so we went for variety because we want to give everybody the opportunity to experience different styles and approaches, even if they haven't tried those games before, they might actually learn that they have a new favourite.

How was the list of games decided? There are some interesting choices there – for example, you have *Super R-Type* and *R-Type III*, but not the original...

RI: When we were developing the list, we obviously wanted to lead with a lot of the recognisable games from well-renowned publishers. As the list started to grow, Jaleco and Data East were added, then Irem and Piko – working with these publishers was really an honour. However, some of the titles and some of the data that we received wasn't properly working sometimes on the console itself, so some of the games that we wanted to feature couldn't be included on the console. There is a very strong possibility that in the future, possibly iterations of the Retro-Bit Generations or any other products that Retro-Bit has in store, they may make an appearance on those consoles.

Which original systems are the Retro-Bit Generations games drawn from? We've noticed a mix of different things...

KM: One of our favourite features about the Generations is that many different systems are represented on it – the NES, SNES and Game Boy, but also included are arcade ports and Mega Drive games. It provides a nice unique look and feel to the experience, and there's a solid mix that all gamers new and old should be able to enjoy.

ZX SPECTRUM VEGA

INFORMATION

- **MANUFACTURER:** Retro Computers Ltd.
- **PRICE:** £89.99
- **WEBSITE:** retrocomputerslimited.com
- **RETAILER:** www.shop.zxvega.co.uk

If you're looking for sheer quantity of games, you can't go wrong with the ZX Spectrum Vega. This plug-and-play reinvention of the iconic computer includes a whopping 1,000 built-in games. What's more, you can add even more games using its SD card slot. The emulation quality is good and we didn't encounter any issues with games built into the device or added to it.

Unusually for a plug-and-play that hasn't gone down the handheld route, the Vega doesn't have a removable controller or cables – the device is contained in a single pad, with USB power cable and composite cables wired in. This isn't a bad thing, as the cables are long, but a modern connection would've been nice.

Our biggest bugbear with the Vega is the control setup. The pad doesn't feel good, although we do like the use of rubber keys for the buttons. However, playing Spectrum games with a joypad, rather than a joystick, just doesn't feel authentic. The other problem is that there's no keyboard support beyond a very fiddly virtual keyboard – a decision which renders the many text adventures on the system much harder to play.

THE FUTURE

The Vega's successor is set to arrive in 2017. The Vega Plus is a handheld console that will include an LCD screen, rechargeable battery and the option to connect an external keyboard.

» [ZX Spectrum] Amazingly, Ultimate's *Knight Lore* was one of the Vega's officially-licensed games.

RESURRECTING A CLASSIC

Retro Games' Paul Andrews on reworking the legendary computer for a new market

Q&A

Why do you think the original Vega Kickstarter was so popular?

I think that the original crowdfunding campaign on Indiegogo was a pleasant surprise and treat almost for Spectrum fans, as I am guessing most fans would never have expected for a new Sinclair-branded product which actually had Sir Clive's name attached to it would appear. I think it created a lot of nostalgic feelings in a lot of people by default. I had nearly got this project off the ground about 12 years ago originally as a handheld device, and then almost onto the Nintendo Wii to partner the C64 games we did, so it was a long time coming!

Do you still think it was the right decision to go with composite only?

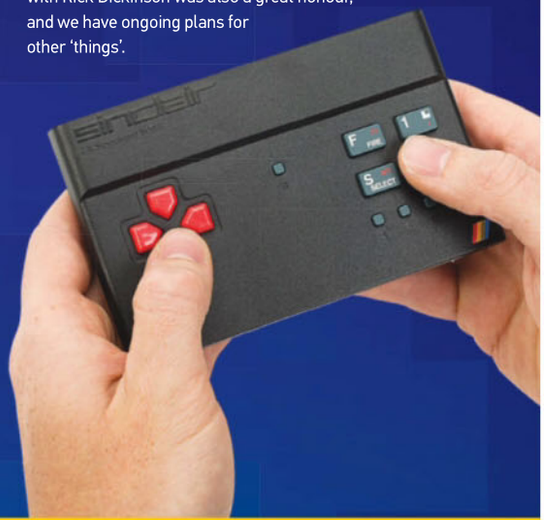
At the original time, Chris [Smith] was working on the device it was the only option to use based on the original components, and the fact we wanted to make the device as affordable as possible for users. The decision to make it in the UK was good for all the right 'moral' reasons, but wrong for the cost reasons, as the decision to make it affordable became overshadowed by the high cost of manufacturing in the UK, so in hindsight we might have done things different. In future projects we will take this into consideration.

Was it right to have all those text adventures with such a fiddly interface?

I have to say the interface did work pretty well, Chris came up with a pretty novel way of selecting words and letters, but yes it still was a bit tricky I have to admit!

How does it feel creating a successful, official follow up to the Sinclair range?

Creating and conceiving the Vega and Vega Plus was a great experience, career-wise. I am genuinely one of the biggest Sir Clive Sinclair fans on the planet, and probably have one of the best collections of his work going. So meeting him was a pleasure. Work-wise, it was probably the most exhausting experience of my life, as it was very, very hard work. Even using all my own publishing companies' resources at a loss to make it happen was hard on every level. Working with Rick Dickinson was also a great honour, and we have ongoing plans for other 'things'.



ALSO OUT THERE...

NEO-GEO X

» **MANUFACTURER:** Tommo Inc.

Owning SNK's luxury console is out of reach for many, but this handheld with a home console docking station offers 20 built-in classics including *Metal Slug* and *Fatal Fury* at an affordable price. We like the HDMI output and joystick, but the handheld feels a little cheaply built.

INTELLIVISION FLASHBACK

» **MANUFACTURER:** AtGames

If you have a hankering for the console that tried to dethrone Atari with in the late Seventies and early Eighties, the Intellivision Flashback is for you. 60 games are included and emulation holds up for the most part, despite some sound issues. *Tower Of Doom* doesn't work correctly, though.

COLECOVISION FLASHBACK

» **MANUFACTURER:** AtGames

Coleco's short-lived, but beloved, entry into the console market gets some love here, with popular titles like *Zaxxon* and *Choplifter* amongst the 60 games built into the device. Controllers are improved over the poor originals, but emulation speed and sound can sometimes be inaccurate.

MULTIFORMAT CONSOLES

Multiformat consoles based on emulation can be a major space-saver – but that's not the only benefit. They come with many features which set them apart from the originals…

RETRO FREAK

INFORMATION

- **MANUFACTURER:** Cyber Gadget
- **PRICE:** £169.99
- **WEBSITE:** cybergadget.co.jp/retrofreak
- **RETAILER:** www.funstockretro.co.uk

The Retro Freak originates from Japan, and you can tell that immediately when comparing it to the Retron 5. Supported systems include the Famicom, SNES, Game Boy, Game Boy Color, Game Boy Advance, Mega Drive, PC Engine and Supergrafx. The system is region-free, and UK systems come with an adapter for NES cartridges. Cyber Gadget also offers an adapter for SG-1000, Mark III and Game Gear games in Japan.

The Retro Freak can store any game you insert into its cartridge adapter to its internal storage or a microSD card, and play them back without the cartridge inserted. Unlike the Retron 5, it also supports adding extra games by SD card. Like its competitor, it offers 720p output over HDMI and the emulation is of a high quality, with various visual filter options, scanlines and more.

The Retro Freak is smaller than the Retron 5, but doesn't include legacy control ports. These are handled by a breakout box which offers one control port for each system that the console supports – and if you want this, you'll need to purchase up the premium edition of the console which will cost an extra £30.

» [PC Engine] The inability to play PC Engine games was one of the few things that put us off the Retron 5

» [Mega Drive] The Retro Freak is a pretty impressive piece of kit, able to handle most games you throw at it.

RETRON 5

INFORMATION

- **MANUFACTURER:** Hyperkin
- **PRICE:** £159.99
- **WEBSITE:** www.retron5.com
- **RETAILER:** www.funstockretro.co.uk

The Retron 5 supports a wide range of games for classic cartridge systems, including the NES, SNES, Game Boy, Game Boy Color, Game Boy Advance and Mega Drive. The system supports games of all regions (with a slot for Famicom games), and can read save data from your cartridges and write it back to them.

Control is handled with either the dedicated wireless controllers or original NES, SNES and Mega Drive controllers (two ports are included for each), and you can use either composite or HDMI video (the latter of which scales to 720p). An SD card slot is available, but this is only for applying translation and other patches – you can't load your own games onto the system as ROM files. Emulation quality is good, with limited accuracy and compatibility issues, and a variety of visual filters are available to enhance your experience – including the all-important inclusion of scanlines.

The Retron 5 does have a few downsides, though – cartridge loading is slow and the cartridge ports are tight, requiring you to use significant force to remove games. Additionally, the bundled wireless controller feels rather cheap and ergonomically poor.

» [SNES] Some people have complained that their US SNES cartridges get stuck. We've not had this issue.

» [NES] The Retron 5 allows you to play NES games from all regions.

MOBILE DEVICES

Android and iOS have become intriguing platforms for retro gaming. Google's OS is notably popular as a base for portable consoles, a couple of which we'll look at below

JXD S7800B

INFORMATION
- **MANUFACTURER:** JXD
- **PRICE:** £119.99
- **WEBSITE:** www.jxd.hk
- **RETAILER:** www.funstockretro.co.uk

The JXD S7800b has been a popular device with retro gamers for a while now, and it's not hard to see why. Running on a Rockchip RK3188 and equipped with 16GB storage, this machine has the grunt to run very demanding Android games as well as emulators for systems all the way up to the Dreamcast.

If the app you're running doesn't support the system's control setup natively, the JXD offers the ability to map its buttons to areas of the touchscreen, allowing you to use a more traditional control scheme across the vast majority of games. It also offers expandable storage and the ability to output to your TV over HDMI.

Some users may be put off the JXD S7800b by its size – rather than being a handheld console of traditional size, this is essentially a tablet with added game controls, so it's not going to fit in your pocket. However, the seven-inch screen means that it's good for many traditional tablet functions such as web browsing.

GPD XD

INFORMATION
- **MANUFACTURER:** GPD
- **PRICE:** £189.99
- **WEBSITE:** www.gpdxd.com
- **RETAILER:** www.funstockretro.co.uk

If you're a fan of the clamshell casing of the Nintendo DS series, you'll feel right at home with the GPD XD – this Android device resembles Nintendo's handhelds pretty closely, albeit with a single touchscreen on the top panel. The chipset is a Rockchip R3288, which gives it a bit more grunt than the JXD, and the device is equipped with 32GB of storage as standard (a 64GB version is available too).

A full suite of buttons is available, along with two analogue sticks recessed into the system's casing, and these can be configured to correspond to regions of the touchscreen for controlling apps. Like the JXD, you can expand the GPD's storage with microSD cards and output to TV sets with HDMI.

Although the GPD XD runs general-purpose Android apps like web browsers, the device's console-style form factor makes them a bit more awkward to use. It's a great choice for those who just want to game, especially if having the most power possible matters to you, but if you want to replace your existing tablet with something just a little more gaming-focused then the JXD might be a better fit for your needs.

HE WHO PUT RETRO POWER IN YOUR HANDS

DotEmu's CEO, Cyrille Imbert discusses bringing classic games to handheld

What benefits do mobile platforms like iOS and Android offer for fans of classic games?

Well, the most obvious benefit is that you carry it anywhere with you, play any time with a very similar experience to the old days. For example, I am a huge fan of *Titan Quest*, bought it and played it when it went out in 2006 and had awesome memories. When we started to have a stable build early this year, I started playing it in the metro every day. It was amazing and I missed my stop a few times because I was very immersed in the game! The second benefit is that by bringing these classics to mobile we also jump on the opportunity to bring new features that everybody is wishing for. It can be graphical options, local/online multiplayer, new game modes/difficulty levels, achievements, modern save systems, etc..

How does DotEmu enhance the original games for mobile platforms?

When we have the opportunity of bringing a classic game to mobile, we first analyse the portability of the gameplay. If we feel that it will be unplayable on mobile, we turn down the project. When we think there is a good fit, we always try to avoid the simple stick-and-buttons solution. We will work with the whole team to iterate on the best adaptation possible to touch screens. For *Ys Chronicles*, we chose to only have one floating stick and no buttons, for *Titan Quest*, we managed to implement contextual buttons and slow-motion mechanics.

Once the gameplay is resolved, we think about what would be the best additional features: does multiplayer makes sense? Should we make a training mode? How many credits should we implement in the arcade mode? Should we rework the UI?

We agree on a certain number of mandatory features and 'nice-to-have' ones and we roll with the production, while constantly testing the game so we know we are on the good path.

Recently DotEmu has moved into original games based on classic properties, like *Pang Adventures*. Can we expect to see more games like this in the future?

Of course! That's what we are doing with our friends at LizardCube by working on an remake of *Wonder Boy: The Dragon's Trap*. We want to bring more remakes and sequels in the future, *Pang Adventures* was the first. We are working on console and PC versions *of Wonder Boy: The Dragon's Trap*, but we don't know yet if it will be adapted on mobile, as we have to go through process explained earlier.

RETRO ENHANCERS

Time has moved on, but your hardware hasn't. Problems like dead batteries and TVs that struggle with low-res output are commonplace, so you'll find these devices essential additions to your inventory

RETRODE

INFORMATION

- **MANUFACTURER:** OpenPandora
- **PRICE:** €64.90
- **WEBSITE:** www.retrode.org
- **RETAILER:** www.dragonbox.de

The Retrode is a smart little USB box that takes a lot of the hassle out of emulating classic games. It reads your original cartridges, so you don't have to trawl the internet for dodgy ROM sites. It has controller ports, so you don't have to play on a keyboard. It even reads the save files for your games, so you can carry your progress from the original hardware and back it up before the cartridge batteries die.

The basic unit supports Mega Drive and SNES games of all regions, and features two control ports for each of those systems. However, the Retrode really shines when paired with plug-in adapters. Versions for Master System, Game Boy/GBA and N64 cartridges are commercially available, and the N64 one adds two control ports for that system. Additionally, if you're handy with electronics you'll be pleased to know that users have made schematics available for other adapters.

It's worth noting that not every system supported by the Retrode offers save file transfer, and settings tweaks are required to get playable copies of some games. However, the device comes packaged with good documentation and has an active user community if you run into any problems with the system.

» [GBA] For many retro gamers, the Retrode is the smart way of experiencing their favourite games.

EVERDRIVE

INFORMATION

- **MANUFACTURER:** Krikzz
- **PRICE:** Varies by system
- **WEBSITE:** www.krikzz.com
- **RETAILER:** www.retrotowers.co.uk

» [Mega Drive] As games continue to climb in price, more and more gamers are using Everdrives.

If you've ever wanted to delve into the world of modifications, fan translations and homebrew games, the Everdrive range offers you the chance to do so. Each Everdrive offers a slot for high-capacity SD cards, allowing you to load dozens of games onto a single cartridge. In conjunction with a device like the Retrode, you can easily load your entire cartridge collection onto a single device.

That's not all the Everdrive is good for, though. In many cases, it can substitute for additional peripherals that might have been needed – all Everdrives are region-free, for example, so you won't need an import adapter. The Turbo Everdrive works in place of a Super System Card for CD-ROM games, the Mega Everdrive can load Master System games, and so on.

Everdrives are no-frills products, so cartridge casing tends to cost extra (and in cases such as the Turbo Everdrive, isn't even an option). This can give a somewhat unappealing look while they're in action. It's also worth noting that enhancement chips aren't necessarily included, which means that certain popular games may fail to run – it's well worth checking the features before you buy.

OPEN SOURCE SCAN CONVERTER

INFORMATION

- **MANUFACTURER:** videogameperfection.com
- **PRICE:** £156.00 (without remote control or power supply)
- **WEBSITE:** videogameperfection.com
- **RETAILER:** videogameperfection.com

The OSSC is an image processor designed by Markus Hiienkari of Finland, which accepts RGB SCART, VGA and component video inputs, and outputs digital video over DVI and analogue audio.

Unlike the XRGB Mini, the OSSC is a line doubler rather than a full-featured video scaler. This means that it only multiplies the existing input so 240p images become 480p, or, with the special line tripling mode, 720p. You can also add scanlines of varying intensity. The key advantage of the OSSC is that it provides lag-free image processing. The results are stunning; take a look at the comparison images for proof.

The OSSC isn't perfect, though. The 720p line triple mode doesn't output a standard image, so your TV may not support it – our own TV didn't. Some users have also reported problems with the SNES, though it worked flawlessly with our display. We'd also have liked digital audio support, but an upgrade board is in the works. The OSSC is available now, but it's hard to get hold of. The only retailer has a waiting list, so it may be a while before you can get one.

THE KING OF UPSCALING

VideoGamePerfection.com's main man, Matt Buxton talks about bringing the OSSC to market

Q&A

How did you first encounter the project?
I found it when Markus Hiienkari posted on the shmups.system11.org hardware forum. My interest was immediately piqued, I'd thought for some time it would be great to have a modern line-doubler that was cheaper than the XRGB Mini and lag-free. Many TVs upscale 480p fine, so something that gets over that initial hurdle of converting 240p to 480p without adding any input lag is an ideal solution for thousands of setups. Being lag-free, enthusiasts can integrate it with secondary scalers if desired, without worrying about degrading their experience.

Why did you decide to have the OSSC mass-produced for sale?
After the initial run of 100 units there was enough interest generated to make it seem like a good idea. Honestly we'd have had more units made if we could have afforded it.

How does being an open-source project benefit the device?
Definitely the community. Apart from the fact we can implement changes based on user feedback much more quickly than Micomsoft do with the XRGB scalers, other enthusiasts can add features too. Already, someone has began work on designing a digital audio add-on board (Markus is currently beta testing that now, actually) and another user has translated the menus into Japanese. All this on a device that's only been available a few months.

The OSSC has proven popular enough that an eager waiting list has developed for it – do you expect that this could be cleared any time soon? How often are the new batches arriving?
We hope to clear the waiting list in the new year. Being just a small company, we need the funds from this batch to fund the next one, which means we have to wait essentially until a good portion of them have sold before getting the ball rolling on the next batch. However, we're generating quite a bit of publicity now so I'd still suggest people who are keen to get a unit should sign up to the waiting list to be first in line. There's no commitment to buy just by joining our list.

XRGB MINI FRAMEMEISTER

INFORMATION

- **MANUFACTURER:** Micomsoft
- **PRICE:** £338.28 (including SCART adapter and EU tax)
- **WEBSITE:** www.micomsoft.co.jp
- **RETAILER:** www.solarisjapan.com

The XRGB Mini Framemeister is a video scaler which accepts a wide variety of video inputs including composite, S-Video, RGB SCART, VGA, component and HDMI, and outputs HDMI video and audio.

Micomsoft's device provides upscaling of retro consoles up to 1080p resolution, and provides high-quality deinterlacing for games that require it. You can also add scanlines, adjust the aspect ratio of the image, tweak sharpness and more. A super-fast scaling engine delivers all of this with just 24ms of input lag, and you may find that the XRGB Mini actually cuts lag by presenting pictures at your TV's native resolution.

Unfortunately, the XRGB Mini does have some bugs. There are certain display modes it doesn't like – for example, the Mega Drive's interlaced output as used in *Sonic 2*'s multiplayer mode. It also takes a long time to adjust to resolution switching – a problem in games like *Chrono Cross*, which has low-resolution gameplay and high-resolution menus. What's more, the XRGB Mini is only available via import and remains rather pricey.

VIRTUAL CONSOLES

Xbox Live Arcade set a trend of online services which let gamers play classics from yesteryear on modern consoles. Now, there's quite a few to choose from...

VIRTUAL CONSOLE

» **COMPANY:** Nintendo
» **WEBSITE:** www.nintendo.co.uk

Nintendo's Virtual Console service started off life on the Wii and is also available on the Wii U and 3DS. The service is at its most mature on the Wii, where it offers Arcade, NES, SNES, N64, Master System, Mega Drive, PC Engine, Neo-Geo and MSX (Japan-only) games. The Wii U adds Game Boy Advance, Wii and DS support, while the 3DS store has access to Game Boy, Game Boy Color, Game Boy Advance, DS, Game Gear releases and SNES. While the prices are reasonable and there's a smorgasbord of obscure gems like *Earthbound* which sell for insane prices in their physical forms, the service

» [N64] Prices are decent on the Virtual Console, with N64 games typically costing around £8.

is let down by an archaic infrastructure that doesn't tie the games to your actual account, meaning you're expect to buy them across multiple systems.

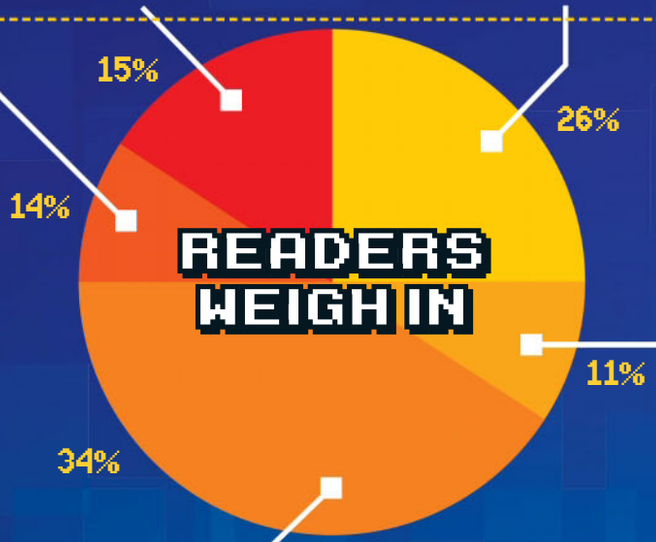
XBOX LIVE

» **COMPANY:** Microsoft
» **WEBSITE:** www.xbox.com

Like PSN, the best version of Microsoft's online service is currently to be found on a last-generation console, the Xbox 360. This is mainly because

» [Xbox 360] Radiant Silvergun's physical price hasn't really been impacted by Xbox Live Arcade.

of the brilliant Xbox Live Arcade, which Microsoft sadly no longer features on its current console, the Xbox One. Lots of exclusive games including *Radiant Silvergun*, *Ikaruga* and *Games Room* can be found on there, giving gamers access to a wealth of classic games. In comparison, the current iteration of Xbox Live on Xbox One is far less impressive, although it does win bonus points for its recent aggressive move towards Xbox 360 backwards compatibility, which features nearly 90 XBLA games that range from Sega's *NiGHTS Into Dreams*, to *Metal Slug 3* and *Frogger*.



STEAM

» **COMPANY:** Valve
» **WEBSITE:** www.store.steampowered.com

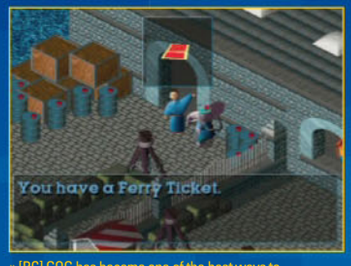
Steam is the biggest digital games service on PC, so as you'd expect it has its fair share of classic games available. Unfortunately, Steam's sheer diversity also works against it and it's simply too broad a service to cater for all your retro needs. While it has some great PC support, with the likes of *Tomb Raider*, *Half-Life* and *Worms* all being available to play, it's less impressive on the retro front, with only a large selection of Mega Drives games standing out. Like GOG, it does feature some insane sales though, with great prices.

» [PC] Compatibility isn't always hot, but there are plenty of classics to discover on Steam.

GOG

» **COMPANY:** CD Projekt
» **WEBSITE:** www.gog.com

Although it features plenty of indie games, as well as CD Projekt's own releases, GOG is first and foremost a retro service. It's built an impressive library of games over the years, including the *X-Wing* series, *Thief*, *Tomb Raider*, Wing *Commander*, *Dungeons & Dragons* and much, much more. Its prices are strong (most likely due to competition from Steam) and like Steam, it offers ridiculously good value for money in its numerous sales. Compatibility issues happen rarely and are quickly sorted out, while its refusal



» [PC] GOG has become one of the best ways to experience classic games.

to employ DRM makes it massively popular with supporters. It's quite simply the best way to experience classic PC games.

PSN

» **COMPANY:** Sony
» **WEBSITE:** www.store.playstation.com

» [PS2] You can play PS2 games on your PS4, but you'll have to pay for the privilege.

Sony's PlayStation Network has grown significantly since its introduction in 2006. The most refined version currently exists on PlayStation 3, where it offers PSone, PS2, and classic retro franchises, in addition to brand-new games. Like the Virtual Console, it began offering more games that were 60HZ-compatible and its prices are reasonable. PS Vita's version offers additional PSP support in addition to PlayStation games, while PS4 is your weakest choice as it lacks PSone support, PS3 exclusives and snubs backward compatibility.

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MYR

IN THE KNOW

- **» PUBLISHER:** RABBIT SOFTWARE
- **» DEVELOPER:** STEVE CLARK
- **» RELEASED:** 1983
- **» PLATFORM:** VIC-20
- **» PLATFORM:** SHOOT-'EM-UP

Blasting alien invaders has been a part of gaming since the beginning but Steve Clark's VIC-20 shooter upped the onslaught to epic levels. Paul Drury activates his shield

Christmas is a time for families to come together around the table, the telly and the Quality Street tin but for Steve Clark, December 1982 was a frenzied three weeks of coding. "It was all-consuming over that Christmas," he recalls. "I wanted *Myriad* to push the boundaries of both my programming and the machine."

Steve literally pushed the boundaries, cleverly POKE-ing the VIC-20's display control registers to remove the vertical borders and increase the size of the playfield. He then filled the enlarged screen will a daunting array of enemies. Buzzers, Swoopers and the worryingly-named Floaters would hurl bullets and themselves at your ship, whilst Pods deposited deadly space debris and passing asteroids threatened to leave a deep impact on your remaining lives.

"I wanted to make something that wasn't boring," enthuses Steve, "with lots of aliens with different characteristics, from *Space Invader* types to *Galaxian*, to some I just made up, like the rotating balls, which had surfaces that bounced your bullets back. You'll also see a *Breakout* influence – I had aliens that dropped bricks which you had to hit more than once to destroy…"

You'll note the references to several classic coin-ops of the early Eighties and *Myriad* also owes a debt to *Defender*, which inspired the thudding sound effects and pixel-spraying explosions, *Phoenix* for the shield you can employ for protection and *Space Firebird* for the option of launching a destructive foray into your foes whilst indestructible. *Moon Cresta* was an influence, too, particularly in the design of your twin-turreted spaceship, with Steve employing the VIC's underused multi-coloured mode to create flames spouting from its exhaust. "I did think about articulating the rocket, so you could build up your ship like in *Moon Cresta*, but multi-coloured mode meant you lost resolution," he explains. "I actually had a *Moon Cresta* in my student house along with some other [coin-op machines], which I'd picked up from pubs when they were getting rid of them. I got them for a hundred quid each, if I remember, and one of my big regrets is selling them in the mid-Eighties. Back then when I was 18, it didn't feel like I was doing a shameless rip-off of arcade games!"

Though *Myriad* is undoubtedly a tribute to the games which had been gobbling ten-pence pieces during his teens, Steve successfully melded together a range of shoot-'em-up styles to create his own distinctive and challenging blaster. He had begun tinkering with games programming on a Commodore PET in the late Seventies and had produced some games for Supersoft, a very early software house set up by Pete Calver and Pearl Wellard in 1978. As the Eighties dawned, he started hanging out in the Rabbit computer shop in Harrow on the Hill, near where he lived, and when Rabbit branched out into publishing, he was on hand to provide some of its early VIC-20 releases, including *Tank-War* and proto-*Snake* game, *Superworm*. It coincided with him beginning a Computing Science degree at Imperial College, London, and soon he was applying his university education to make *Myriad* a step-up from his previous titles.

"I wanted it to be smooth and that meant being clever with timing," explains Steve. "I'd learned Simula at University, which is regarded as the forerunner to modern object-orientated languages and I borrowed the concepts. You could modify the IRQ interrupt and punt it off to your own code so I put in timing flags so each alien would have a little routine to do its animation and so

» [VIC-20] The screen can get busy at higher levels, with asteroid showers and space debris adding to the mayhem.

» A teenaged Steve, with the Commodore PET he would use as a development system for *Myriad*.

MYRIAD

» [VIC-20] Your twin-lasered ship packs some serious firepower. You're going to need it…

forth. At high levels, you do sometimes find the game slows down because not everything could quite be processed during the 60th of a second you have for the interrupt… kill a few things and suddenly you're back to full speed!"

Indeed, this 'slowdown' as the screen becomes crammed with monsters and missiles is strangely prescient of the 'bullet hell' shooters. *Myriad* certainly borrowed from its forebears but it also pushed the genre forward and remains probably the finest shooter on the VIC. Despite trying every trick in the manual, Steve couldn't quite squeeze the game into the unexpanded VIC-20 and it required an additional 3K of RAM to run, but the game still sold over 12,000 copies. It's a figure Steve is well aware of due to the £23,000 of unpaid royalties left owing him as publishers Rabbit software went bust amidst allegations of financial shenanigans by its boss, Alan Savage.

"My dad was a lawyer and he said, 'Let's go and get the money.' Alan had been sitting on all the money and I wasn't the only one suing him. There were things going on in his personal life, too. He was found hanged in a wood. I was only 20 and it had a big impact on me."

It was a tragic end to Rabbit Software and *Myriad* got rather lost as a result of the aftermath. The game did get a US cartridge release through publishers HES, renamed *Robot Panic* and with rejigged graphics, but Steve never saw any royalties from that deal either. He stayed in the games business, though, enjoying a long career first at Romik and then with Virgin and later BT's Gameplay multiplayer service into the new millennium. We hope to share Steve's full story in a future issue of **Retro Gamer** but *Myriad* will always be a game that will remain close to his heart. "It was a milestone for me. It exploited everything I knew about programming and was a step above other games in the market at that time. I've remembered it on and off all my life. In fact, I still have a shrink-wrapped copy here in [my] safe!"

RAM PACKED

Four other VIC games that made the most of a memory expansion cartridge

MOONS OF JUPITER, 3K

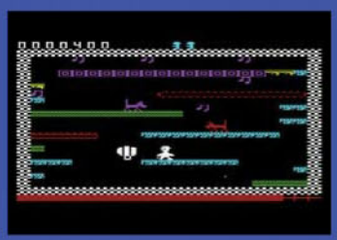
1982

■ Another game that used ingenious hardware tricks to expand the size of the screen, this is one of the best non-vector *Asteroids* clones of the era.

JETPAC, 8K

1983

■ Ultimate's first release appeared on the VIC-20, as well as the Spectrum and provides much satisfying space blasting. It returned in 2007 on XBLA as *Jetpac Refuelled*.



PERILS OF WILLY, 16K

1984

■ Good old Miner Willy gets his own exclusive VIC outing, featuring the kind of pixel-perfect platforming and bizarre inhabitants that you'd expect.

DOOM, 35K

2013

■ This is a staggering technical achievement and proves that, with enough memory and coding witchcraft, the humble old VIC can still deliver surprises to us 35 years on.

Armalyte

DON'T TAKE IT LYTELY...

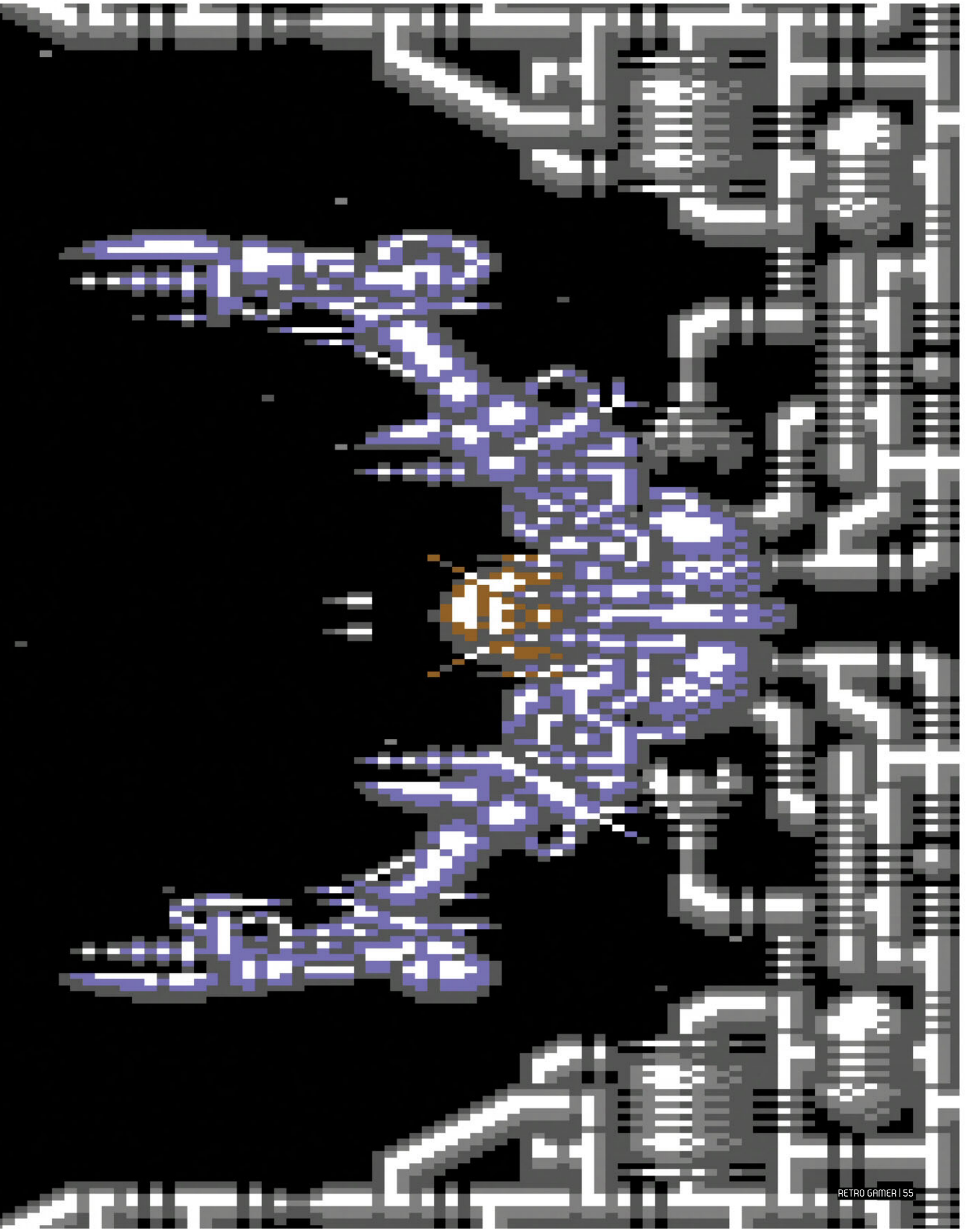
RETROREVIVAL

» **COMMODORE 64** » **1988**
» **CYBERDYNE SYSTEMS**

Do you think that hardware engineers ever imagine games like *Armalyte* running on their systems? We're not sure that they do. When the fine folks at Commodore were putting together the successor to the VIC-20, games like *Armalyte* just didn't exist in the home. Even then, putting such a game on the C64 required expert knowledge of the problems that would be faced and how to work around them. *Armalyte* looks gorgeous – attractive visual design, flicker-free sprites and big boss enemies. But sometimes that comes at a price, as with the game's odd moving explosions – a necessary evil to avoid flicker. Still, we can only imagine someone seeing such a technically-impressive feat on their humble machine for the first time and being moved to tears.

The thing is, I'm not a hardware engineer. I'm a player, and for players *Armalyte* possesses a rather different quality liable to make you cry: extreme difficulty. Like so many shoot-'em-ups of the late Eighties, there's an optimum route through each stage and success in some of the trickier parts depends on memorisation. The fact that it doesn't strip you of all your power-ups upon death, like so many contemporaries, is a comfort, but most gamers will require a fair bit of practice to even see a boss for the first time.

And ultimately, that's why *Armalyte* isn't always my go-to C64 shooter. It's kind of like a steel replica of a cake: it looks gorgeous, but actually eating it is difficult and rather painful.



ZOOL

NINJA OF THE "Nth" DIMENSION

With a few games under his belt, Gremlin's George Allen was thrown into the Nth Dimension. He survived, and he's going to tell Kim Justice all about it

IN THE KNOW

» **PUBLISHER:** GREMLIN GRAPHICS
» **DEVELOPER:** GREMLIN GRAPHICS
» **RELEASED:** 1992
» **PLATFORM:** VARIOUS
» **GENRE:** PLATFORMER

DEVELOPER HIGHLIGHTS

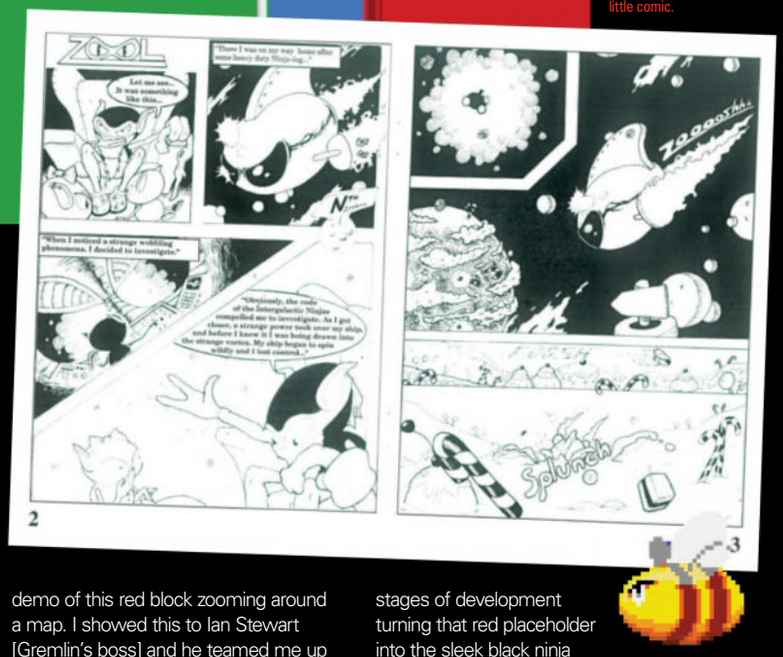
MONTY ON THE RUN (PICTURED)
SYSTEM: C64, VARIOUS
YEAR: 1985

LOTUS ESPRIT TURBO CHALLENGE
SYSTEM: AMIGA, VARIOUS
YEAR: 1990

HARDWAR
SYSTEM: PC
YEAR: 1998

» [Amiga] We'll admit the product placement was a bit, erm, aggressive.

» The game's manual included this neat little comic.



***Aero the Acrobat, Gex, Jazz Jackrabbit*: what do they all have in common?** They're just three of several early Nineties games that are usually cynically described as '*Sonic* clones' – speedy platformers with animal heroes, perhaps with a bit of attitude thrown in, a pair of shades here and a raise of the eyebrow there. *Zool*, *Gremlin Graphics*' fast-paced 1992 platformer with a somewhat intense-looking Gremlin Ninja Of The Nth Dimension at the helm, is usually thrown into this bag, too – but as with most of those games just mentioned, the story is somewhat more complex than a publisher simply wanting to ride a spiky blue hedgehog's coattails. George Allen, the designer of the game, found the makings of *Zool* in his previous project – the second entry in the popular *Switchblade* series. "It began with a scroll routine I wrote about a year before *Zool* started. I used it on *Switchblade II*, but that game was relatively slow paced, so after the game was done, I wrote a demo of this red block zooming around a map. I showed this to Ian Stewart [Gremlin's boss] and he teamed me up with [Adrian] Carless a few days later." This routine, while not fit for purpose on a slow adventure-style platformer, like *Switchblade*, was perfect for the sort of fast-paced 16-bit platformer that was soon to become the next big thing in gaming, and it is something that George is very proud of creating. "It was pretty quick, using the coprocessor to wrap the screen around vertically as well as horizontally. It also had some compression built in to help make the maps bigger – you couldn't have a fast game without large maps. I had the idea one afternoon and coded it in a couple of hours. I remember everyone heading to the pub and I stayed behind to get it done. I still remember the feeling when I got it working and looking super fast."

George and Adrian, who started working for Gremlin as a graphics designer in 1991, would spend the first stages of development turning that red placeholder into the sleek black ninja that we all know today. "One of the first things we did was talk about what the main character could do and I provided the technical specs for the animation. I used the Amiga's few hardware sprites for the character so he could update every frame along with the scroll routine." Using just these eight sprites, the duo was able to create a strong and expressive character that moved fluidly, and who also fit the bill of potentially being a mascot for Gremlin. It is fairer to think of the more-famous *Sonic* and *Zool* as contemporaries, both of which have a certain devil-may-care edge about them, neither of which would look out of place in an alternative comic of the day. "Zool, the character, is Ade's creation. Within a couple of weeks he had him pretty much final. There were a few iterations and colour options along the way, and I remember he ▶

» [Amiga] A transdimensional ninja with a pair of rubber ducks, you don't see that every day, huh?

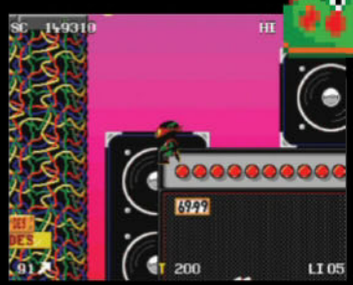
ZOOL 101

■ This puts you in the shoes of a red-and-black-clad gremlin ninja from the Nth Dimension who has been forced to land on Earth and jump his way through six themed worlds. The game was hugely successful, and was ported to almost every console and computer of the day, with a sequel – *Zool 2*, naturally – arriving in 1993.

» An early image of George from the *Zool* days. He still works in the industry and is currently at Clockwork Pixels.

had three eyes at one point which we liked, but Ian preferred the two-eyed version." For the level design and look of the game, there would be a lot of ideas experimented with and ultimately scrapped. But George and Ade had a very consistent way of working things out, and gradually bringing these ideas to fruition. "Most of the game was designed with us talking for an hour or two about what could happen in each world and what the creatures would be like. I'd write everything down in a list and that would be our work for the month or so until the next world."

When playing *Zool*, you may be surprised at exactly what Zool as a character can do, and how many different types of movement the game manages to fit into a control scheme where most of the time there was only one button available. It was imperative, though, that rather than just looking like a ninja, Zool should actually have the moves of a ninja – and for this, George Allen looked to a Capcom arcade hit for inspiration. "I played a load of arcade games and *Strider* was a huge influence for me, leading to the wall climbing and slide attack."



» [Amiga] You'll find yourself exploring a lot of intriguing locales in the Nth Dimension.

> **"I played a load of arcade games and Strider was a huge influence for me"**
> George Allen

Other moves would come about by way of the other games that George had made for Gremlin, Ade's creation of the ninja character itself, and even the creation of some moves that only exist in specific worlds of the game, making for an impressive array of animations and a particularly busy sprite sheet. "Zool balancing on the edges was taken from *Venus The Flytrap*, my first Gremlin game. Ade's ninja design led to his attacks and magic use."

And so development went on. As George relates to us, *Zool* was on the whole developed in an atmosphere of relative serenity when compared to most big titles. "The development was pretty straightforward with not too much crunch time, maybe just a few days during QA just before the game went off for duplication. I remember trying to track down a bug and finding the solution about an hour after the game went out… hopefully it just happened in the first batch of disks." Indeed, the development of the game had gone to schedule in such a way that when Gremlin put the release of the game back a couple of months, thinking it strong enough to launch in the more competitive summer season, *Zool's* team had the chance to have a little bit of fun with the game, including the addition of a *Salamander*-esque bonus shoot-'em-up level. "I was a big fan of the *Gradius* games," George laughs, "the game was finished just before they decided a summer release would be best, so we suddenly had an extra month or two to add/tweak stuff. It's possible this is when the shooter came about, but I could be wrong." Ultimately, *Zool* shipped with nothing of any importance left on the cutting room floor. "It was decided early on we'd have two discs and we had some extra time at the end of the development. I can't remember how full each disk was, but Tony Dawson made some huge maps." It should be noted that for a game that has been derided in some circles as a *Sonic* knock-off, *Zool* is free of any feature-creep in its development, or any attempts to shift the game in a direction that was influenced by the blue hedgehog's success – it started out in 1991 as a scroll routine for a fast platform game, that was how it was developed, and ultimately that is what was released.

Of course, there was a certain odd something that does stand out about *Zool* that did creep its way into the game – the sponsorship of a rather popular brand of lollipop. "The weirdest thing was being told that Chupa Chups were going to be a part of the game. We

FOOD FIGHT!

Games and food go hand in hand, right? So here's what happens when you cross the streams…

KP SKIPS ACTION BIKER WITH CLUMSY COLIN

VARIOUS, 1985

■ This game sees you play as Skips' erstwhile cack-handed Eighties mascot on a bike, as he collects upgrades for his vehicle and tries not to break anything. Strangely, this name and premise is shared by similar games for the C64, Atari 8-bit, and a crap Speccy top-down game.

YO! NOID

NES, 1990

■ A strange platformer featuring the famed Domino's Pizza mascot, who was popular back in the Eighties, despite looking like a disgraced entertainer in an ill-fitting costume. This is one of those NES games that's loved and hated in equal measure, although in most cases it's not exactly regarded as Capcom's best effort on the console.

JAMES POND 2: ROBOCOD

VARIOUS, 1991

■ It'd be silly not to have *Zool*'s fellow popular platformer in this list, wouldn't it? Not only is the almighty *Robocod* thoroughly littered with McVities' Penguin chocolate bars, you even have to p-p-p-pick up penguins from all areas of each level in order to beat the game. It's still jolly good, mind you.

» [Amiga] George Allen took inspiration from *Strider* when designing Zool's various moves and feats.

suddenly had to add the logo and tweak a few of the levels," George remembers. The first world of the game in particular was transformed into a suckers' paradise, with the Chupa Chups logo plastered all over the game area. It wasn't just limited to the content of the game, either – copies of *Zool*'s first run came with a Chupa Chups lolly inside of it. If you've been saving that lolly inside the box for 24 years thinking that it'll be incredibly valuable one day, mind, you might be in for a surprise, as George was: "I got my copy of *Zool* out last year and my free lolly had turned into a goo, oozing onto the instructions and one of the disks." Even for the most diehard collector, this is one instance where a sealed copy might not be the best thing to have…

The release of *Zool* was a success – the game appeared on the front covers of Amiga magazines, receiving high scores such as a stunning 95% from *Amiga Format* and a 90% from *Amiga Power*, and it sold tons of copies. Ports to almost every format going happened soon after, from the Mega Drive and SNES to DOS and the Acorn Archimedes, and there even exists such a thing as *Zool* fiction – books released back in the early Nineties as a way to help feed the hype machine. "Gremlin had great marketing. It knew how to get coverage and even how to get an extra percentage point or two," George says.

George has continued to work his trade in games – for ten years he's written indie games as Clockwork Pixels, preferring small teams that are somewhat similar to the teams he had back in the days of the Amiga. *Zool* continues to remain one of his proudest achievements in the world of games. "I don't think the game has fans as such, although reading some YouTube comments just now, maybe it did have a few back in the day," he says. "My friends were super positive about it all and made me a *Zool*/*Sonic* T-shirt to wear down the pub. I still have it!"

Thanks to George Allen for his time.

ONE STEP BEYOND!

AMIGA, 1993

■ One day Colin Curly was sitting at his Amiga, and just as he was about to eat his beloved Quavers, he was sucked into a netherworld beyond and forced to navigate a load of difficult jumping puzzles. It's a shame that there's no such thing as one massive Quaver in a bag, but that doesn't stop this game being excellent.

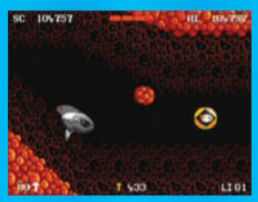
CHEX QUEST

DOS, 1996

■ The most successful game ever to come out of a cereal box, this advertisement for American Shreddies takes the *Doom* engine and twists it into an FPS where you save human colonies from a bunch of mucus-throwing green slimes with the power of grain-based checkered cereal. Yes, it is as weird and as wonderful as that sounds.

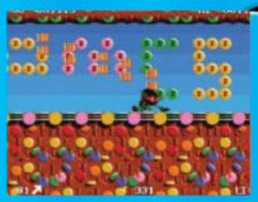
ZOOL'S MINIGAMES AND SECRETS

There's plenty of secrets hidden in Zool. Here are just a few memorable ones…



SPACESHIP SHOOT-'EM-UP

■ *Zool*'s main bonus area consists of a side-scrolling shoot-'em-up, a la *Salamander* – it's strange to see something so fully featured as a bonus level, but then the team had a bit of time left over at the end of production. Guiding your massive ship through these alien intestinal tracts is, as you'd expect, about as tough as everything else is here.



OI, GAMESMASTAH!

■ If you wait a while at the start of Level 1-3, the game will allow you to enter the GamesMaster Room, a cool secret with everyone's favourite videogames show spelt out in collectables! When *Zool* appeared on *GamesMaster* challenges, it did so in the form of a level specially made for *GamesMaster*, filled with the show's branding instead of Chupa Chups.

FOR FURTLERS ONLY

■ There's plenty of opportunity for cheating in *Zool* – the game features not one, but *two* codes with plenty of invincibility/level-skipping options! Whether you choose 'goldfish' or 'streetlamp', you can easily stroll through the game. Be careful, though – pressing 2 with streetlamp enabled actually makes you lose a life.

ZOOL'S MAGIC PIANO

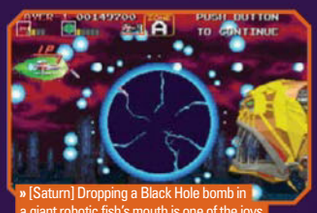
■ The Music World's centrepiece is this keyboard, filled with keys that you can jump on. Some will hurt you, but others, pressed in sequence, will give you bonuses! You can find these combos on staves dotted around the world. Not only that, but entering the opening notes to *Close Encounters Of The Third Kind* brings you to another shoot-'em-up stage.

Minority Report

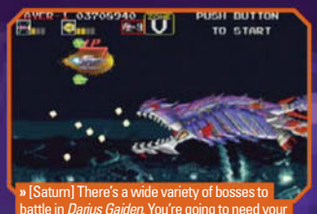
INTERESTING GAMES YOU'VE NEVER PLAYED

SEGA SATURN SHOOT-'EM-UPS

The Saturn is a fantastic machine for shooter fans, and the platform of choice for playing import masterpieces like Radiant Silvergun and Battle Garegga. Mike Bevan investigates some other less well-known titles that are more than worthy of your time…



» [Saturn] Dropping a Black Hole bomb in a giant robotic fish's mouth is one of the joys of *Darius Gaiden*.



» [Saturn] There's a wide variety of bosses to battle in *Darius Gaiden*. You're going to need your wits about you.

» [Saturn] This nasty mechanical crab guards one of the final zones in the game.

DARIUS GAIDEN

■ DEVELOPER: **TAITO** ■ YEAR: **1996**

■ American videogame publisher Acclaim was troubled throughout the Nineties to say the least, with a string of terrible movie tie-ins like *Total Recall* and *Street Fighter: The Movie*, notorious duds like *Rise Of The Robots* and even lawsuits questioning its management practices. However, we're prepared to forgive its multiple sins if only for giving Western audiences the chance to finally play arcade-perfect home versions of *Bubble Bobble* and *Rainbow Islands*, along with a couple of previously little-known Taito shooters, *Rayforce* and *Darius Gaiden*.

Taito had invented the arcade shooting videogame in 1978 with the iconic *Space Invaders*, but its aquatic-themed shooter series *Darius* was rather less famous. Some shoot-'em-up fans considered it a poor man's cousin to Konami's graphically-gorgeous *Gradius* and *Salamander* series or Irem's groundbreaking *R-Type* games. Arguably the only really cool thing that *Darius* had against its competitors was a branching level structure that enabled players to plot their own course through the game. Along with a rather over-the-top dual-screen arcade cabinet and the use of oversized sea creatures as its bosses. Oh, and the music was rather ace, too.

In 1993 Taito released its F3 arcade board, a cartridge-based system with similar state-of-the-art capabilities to SNK's Neo-Geo hardware. It then set about resurrecting some of its old arcade franchises, including *Darius* which was last seen in arcades six years previously. The resulting third coin-op title, *Darius Gaiden* (meaning '*Darius Side-story*') was a supercharged sequel with psychedelic visuals and an otherworldly soundtrack by Taito's in-house electronic funk band Zuntata. And it has to be said, it's a massive improvement on previous entries in the *Darius* series.

Gone is the bland colour palette and backgrounds of the older games, replaced by a vivid and colourful visual style more approaching that of Japanese anime. The player's Silver Hawk ship has never looked shinier than here, nor have the various stages been so majestically trippy or the leviathan bosses so beautifully realised and animated. From giant seahorses to flounders, sea anemones, angler fish and armoured crustaceans there are plenty of giant battleships approaching you in the game's 28 levels. A mention has to be made of our favourite, a squid called Titanic Lance that resides in Zone M, which is about five screens long, nearly twice the length of *R-Type*'s famous Bydo flagship boss.

New to this entry is the 'Black Hole Bomber' smart bomb, a rather nifty

IF YOU LIKE THIS TRY...

DARIUSBURST CHRONICLE SAVIOURS

PS4/PC/VITA

■ This new incarnation is visually closer to the older dual-screen *Darius* games, a new 'burst' mechanic allows players to counter enemy laser beams in a method similar to that seen in the retro Taito shooter, *Metal Black*.

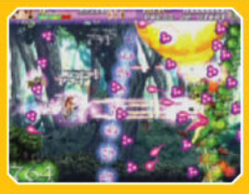
SINE MORA

XBOX 360/PS3/MOBILE

■ Grasshopper's shoot-'em-up is one of the finest in recent years, with epic boss battles owing much to the *Darius* games. As polygon-rendered shooters go it's one of the most beautiful, with wonderfully realised characters and backgrounds and an intriguingly dark plot.

DEATHSMILES

XBOX 360/PC/MOBILE



■ Cave's fantasy shooter is a must-have for fans of the genre, with exquisite visuals, a brilliant score-chaining system, and a *Darius*-like approach to choosing your route through the game. There are modes to suit both novice and expert players and some wonderfully-crafted boss fights.

IN DEPTH

weapon that creates a black hole, sucking smaller enemies into oblivion while chucking blasts of lightning at bigger baddies and bosses. Admittedly the game places more emphasis on the strategic use of these bombs than it should, especially on later stages when the screen is awash with merciless sea-life. Another nice touch is the ability to capture mini-bosses and use their firepower against the enemy by capturing and destroying their weak spot. *Darius Gaiden* also provides an old-school challenge by giving you just three continues, with the goal of beating the final boss being also a case of finding the path of least resistance through its labyrinth of branching zones. And while there are purer shoot-'em-ups on the Saturn, we'd be hard pressed to find any that offer so much enjoyment for the £30 price of a copy of *Gaiden*.

BLACK HOLE BOMBING

■ The powerful Black Hole bombs in your arsenal are your greatest asset, and your stockpile is denoted in the bottom-left of the screen. Try not to run out...

SHIELD-ME-DO

■ The glowing green shield around your ship can absorb a number of enemy bullets or lasers, but beware, brave pilot... once it is depleted, the next hit will destroy your Silver Hawk.

POWER UP

■ Collecting the various coloured floating pickups gradually increases your laser and missile power and shield. The gauges on the top-left corner indicate their current status.

MINI-BOSSES

■ Smaller bosses sometimes have a spherical structure located on their top. Destroying these weak points will link the mini-boss to your ship so you can harness its powerful firepower.

Minority Report

SOUKYUGURENTAI

■ PUBLISHER: **RAIZING** ■ YEAR: **1997**

■ There are some that would tell you that this game, rather than Treasure's legendary (and very expensive) *Radiant Silvergun,* is the most impressive shoot-'em-up on the Sega Saturn. And it's an understandable viewpoint given the incredible presentation, graphic design and technical merit on display from its developer, Raizing – producer of the famed *Battle Garegga.* Compared to *Silvergun*'s more deliberate pace, *Soukyugurentai*, also known as *Terra Diver,* plays out at blistering speed employing a satisfying missile-lock mechanic, where you attempt to trap enemies in your targeting reticule while dodging a constant hail of fire. Like *Radiant Silvergun,* the game originated on the ST-V arcade board which was based on the Saturn, and takes advantage of many unique features of Sega's hardware. These include mixing 2D sprites and 3D polygonal backgrounds, and some of the most remarkable uses of sprite scaling and rotation ever seen in a shoot-'em-up. Enormous aerial battleships and other mechanical monstrosities, bristling with intricate graphic detail, zoom and spin around the screen to an extent making many other shooters look relatively static in comparison. Witness the flame-throwing tank boss of Stage 3 or the massive flying wings seen later in the game, which, as are all the various bosses here, labours of love by the Raizing graphic artists. It's a crying shame that *Soukyugurentai*'s publisher, Electronic Arts, never released the game outside of Japan because it's a real showcase for the Saturn's capabilities. However, if you can track down a copy and are able to afford its relatively high import price it may well be worth it.

» [Saturn] Soukyugurentai features a mix of 2D and 3D polygon graphics.

» [Saturn] Your mission on stage two is to take down a rogue Skylab.

» [Saturn] The level of graphic detail in the game is quite staggering.

MORE GAMES TO PLAY

» LAYER SECTION

■ DEVELOPER: **TAITO**
■ YEAR: **1995**

■ Originally released in the arcades as *Rayforce*, this was the first outing in a series that saw sequels in *Raystorm* and *Raycrisis*. Like *Darius Gaiden*, it was an F3 board arcade release from Taito later converted to the Saturn, introducing the celebrated laser lock-on style of gameplay seen in its successors. To add to the confusion the Western release by Acclaim was renamed again as the rather unimaginative *Galactic Attack*.

» COTTON 2

■ DEVELOPER: **SUCCESS**
■ YEAR: **1997**

■ The successor to an obscure arcade game that also made its way onto the PC Engine, *Cotton 2* is a cute shoot-'em-up featuring a broom-riding witch fighting through a haunted magical kingdom. The graphics are rather lovely in a twee kind of way, and it's notable for its bizarre bonus game where our heroine stops to pick up falling casks of tea. Its sequel, also on Saturn, *Cotton Boomerang*, is actually more of a remix of this game.

» KINGDOM GRAND PRIX

■ DEVELOPER: **RAIZING**
■ YEAR: **1996**

■ A hybrid of racing and shooting action, *Kingdom Grand Prix* can be a bit of an acquired taste, but there's plenty here to entertain both casual and hardcore shoot-'em-up fans. It's basically *Wacky Races* meets *Battle Garegga* in a fantasy medieval setting, with a touch of the old *Alleykat* thrown in for good measure. And like most Raizing games the art direction is often inspired and rather gorgeous.

» SEXY PARODIUS

■ DEVELOPER: **KONAMI**
■ YEAR: **1996**

■ Four *Parodius* games, literally parodies of Konami's own *Gradius* shooter series, are available on the Saturn. The first two made it to Europe as *Parodius Deluxe Pack*. The last two, including this game, were only released in Japan. The extent of this game's smut doesn't go much further than the appearance of the odd bunny girl and the addition of branching paths and 'missions' make it arguably the best of the bunch.

GUARDIAN FORCE

■ DEVELOPER: **SUCCESS** ■ YEAR: **1998**

■ Although one of the obscurer Japan-only Saturn shooters, *Guardian Force* is a game we can't recommend highly enough to those that enjoy an interesting twist in their shoot-'em-ups. Developed by Success, the studio behind the cute *Cotton* shooting series, it's a novel tank-themed game that echoes past titles like *Granada* and Namco's *Assault*. Gameplay-wise, though, it's perhaps rather more similar in feel to Compile shooters such as *Super Aleste* and *Zanac*, with a frenetic pace and lots of pickup bonuses, and as such is fairly unique on the Saturn. Ostensibly a traditional vertical shooter, *Guardian Force* loves to play around with the format, giving you an extra angles of fire via a 360-degree turret, and swapping the scrolling direction regularly to keep you on your toes. The bas-relief graphics are detailed and colourful, if not quite on the level of something like *Soukyugurentai*, but they do the job. But the main plus for this game is how much fun it is overall, especially with two players. Being able to fire in all directions makes for a great co-operative experience as you attempt to cover each other while competing for bonus items and power-ups, and the various weapon add-ons are very entertaining, particularly the one that looks like a giant blue Yo-Yo Of Doom on a string...

» [Saturn] Your little tank is equally at home blasting ground or air based enemies.

» [Saturn] Behold the mighty Yo-Yo Of Doom(™).

"Being able to fire in all directions makes for a great co-operative experience"

RETRO STINKER

» TERRA CRESTA 3D

■ DEVELOPER: **NICHIBUTSU** ■ YEAR: **1997**

■ The original was a classic scrolling arcade shoot-'em-up, but unfortunately this sequel is a real missed opportunity. Cursed with blocky graphics and dull level design, there are dozens of Saturn shooters far better than this.

» BATSUGUN

■ DEVELOPER: **TOAPLAN**
■ YEAR: **1996**

■ One of the last games from arcade shooter manufacturer Toaplan, *Batsugun* is considered by many to be the forerunner of the modern 'bullet-hell' shooter as typified by Cave's *DoDonPachi* (also available as an import title on the Saturn). Ridiculous over-the-top firepower is the order of the day, often covering the entire screen, and a clever touch is the way each of the three ships gradually 'evolve' as play progresses.

» SENGOKU BLADE

■ DEVELOPER: **PSIKYO**
■ YEAR: **1996**

■ Psikyo is best known on the Saturn for the WW2-themed *Strikers 1945* games, and this rare sequel to its first ever arcade shooter, *Samurai Aces*, is now something of a collector's item. It's an attractive scrolling shoot-'em-up with an unusual futuristic feudal Japanese theme, where airborne samurai fight giant mecha. There's some great character design, and the game has a unique atmosphere among Saturn shooters.

» SHIENRYU

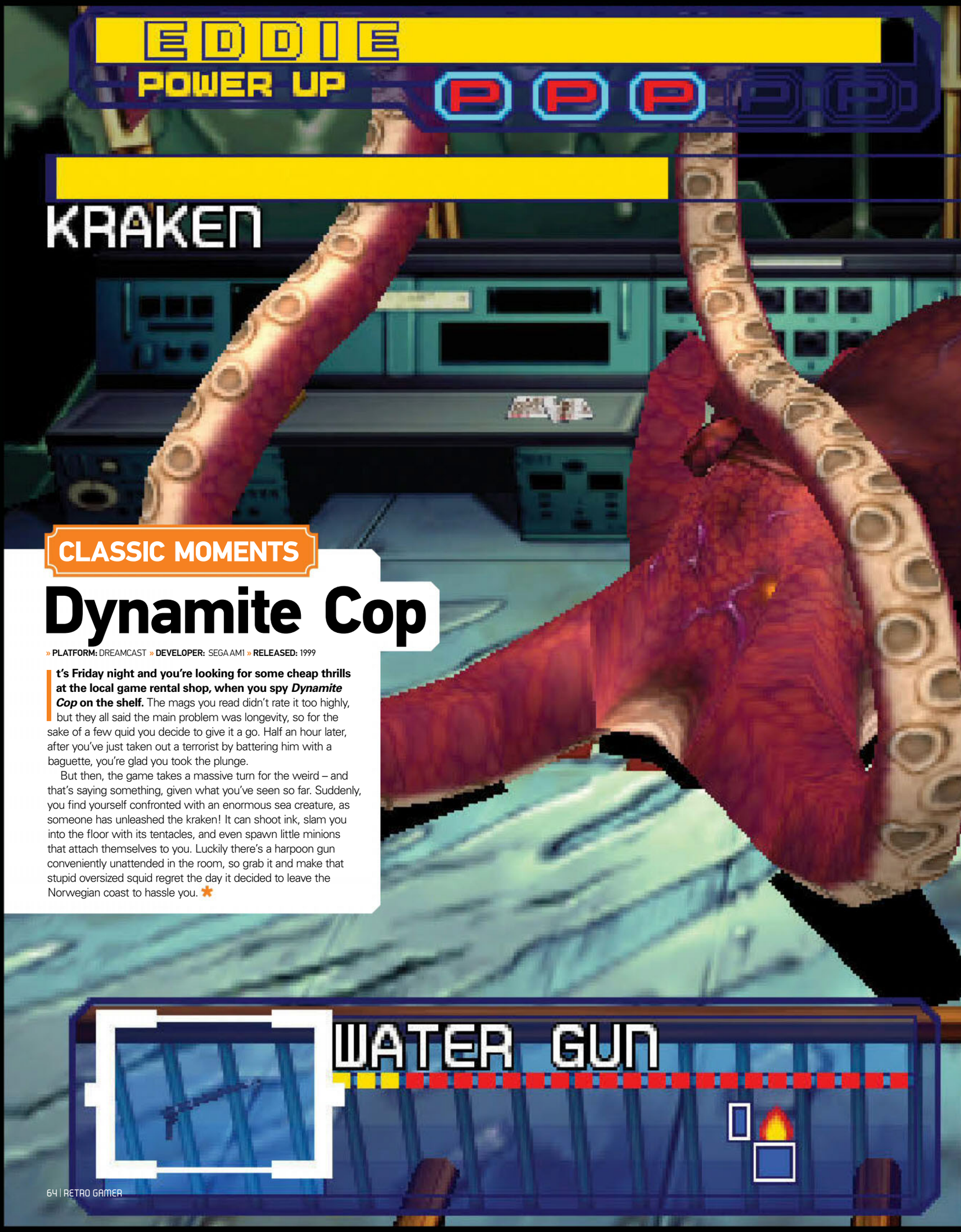
■ DEVELOPER: **WARASHI**
■ YEAR: **1997**

■ An appealing shooter very much in the mould of *Raiden*, *Shienryu* features some accomplished and colourful visuals coupled with familiar, but solid, game mechanics. Although it's definitely a more old-school style of game than the likes of *DoDonPachi* or *Battle Garegga*, the fun weapons, particularly a snake-like chain-laser, and the copious amounts of shrapnel flying about the place add up to an enjoyably diverting experience.

» THUNDERFORCE V

■ DEVELOPER: **TECHNOSOFT**
■ YEAR: **1997**

■ The *Thunderforce* games had long been considered some of the finest shooters to grace the Mega Drive when this next-gen sequel appeared in Japan. Making the jump from 2D to 3D polygon graphics, *Thunderforce V* feels different, with fast-paced gameplay hinged around utilising your CRAW options and weapons including the 'free range' lock-on system that can disintegrate bosses in seconds.



CLASSIC MOMENTS

Dynamite Cop

» **PLATFORM:** DREAMCAST » **DEVELOPER:** SEGA AM1 » **RELEASED:** 1999

It's Friday night and you're looking for some cheap thrills at the local game rental shop, when you spy *Dynamite Cop* on the shelf. The mags you read didn't rate it too highly, but they all said the main problem was longevity, so for the sake of a few quid you decide to give it a go. Half an hour later, after you've just taken out a terrorist by battering him with a baguette, you're glad you took the plunge.

But then, the game takes a massive turn for the weird – and that's saying something, given what you've seen so far. Suddenly, you find yourself confronted with an enormous sea creature, as someone has unleashed the kraken! It can shoot ink, slam you into the floor with its tentacles, and even spawn little minions that attach themselves to you. Luckily there's a harpoon gun conveniently unattended in the room, so grab it and make that stupid oversized squid regret the day it decided to leave the Norwegian coast to hassle you.

MORE CLASSIC DYNAMITE COP MOMENTS

Overkill

Apparently, machine guns and bazookas just aren't enough for Bruno Delinger and his pals. Sometimes they need the ultimate firepower, and that means an anti-ship missile. Launch this powerful projectile and whatever it hits will be blown sky high in a mushroom cloud, with the camera tilting upwards to show off the full extent of the carnage you've caused.

Quick-Time Explosion

Dynamite Cop isn't short on brief QTE reaction tests, but our favourite is one that takes place after your character grabs a motorbike. Hit the button at the right time when you encounter enemies and you'll slide the vehicle into the baddies, sending them sky-high with the resulting explosion – just like in your favourite over-the-top action movie.

Underkill

Much of the fun of *Dynamite Cop* comes from the different weapons that you can utilise in the pursuit of justice, from the mighty to the measly – and they don't come much more measly than fruit. Apples can be eaten for a small health boost, but disregarding their intended use, you can lob them at your enemies for a humiliating beating.

Greetings, Grapple Fans

Grabbing enemies and sending them hurtling across the screen is always fun, but we like things with a bit more of a *World Of Sport* flavour – and *Dynamite Cop* doesn't disappoint in this regard. Suplexes of all varieties, atomic drops, the dreaded backbreaker and all manner of agonising submission holds can etch pain across the faces of your enemies.

BIO

For the follow-up to *Die Hard Arcade*, Makoto Uchida and the Sega AM1 team wanted to make a beat-'em-up that was bigger, better and way more ridiculous. The result was *Dynamite Cop*, a Model 2 arcade game which soon found its way to Sega's new Dreamcast. It wasn't tremendously well-liked by critics, with reviewers focusing on its underwhelming visuals and lack of replay value, but the game's sense of humour and unapologetic arcade design has won it a cult following. The game was later given a total graphical makeover and re-released into arcades under the name *Asian Dynamite* in 2006.

LICENCE TO THRILL

NOW SHOWING: INDIANA JONES AND THE TEMPLE OF DOOM

FILM

- **» YEAR:** 1984
- **» STUDIO:** Paramount
- **» DIRECTOR:** Steven Spielberg
- **» STARRING:** Harrison Ford, Kate Capshaw, Jonathan Ke Quan, Amrish Puri, Roshan Seth, Philip Stone
- **» BUDGET:** $28,000,000 (ESTIMATED)
- **» BOX OFFICE:** $333,000,000

GAME

- **» YEAR:** 1985
- **» PUBLISHER:** Atari
- **» DEVELOPER:** In-house

By 1984, the world was eager to experience another adventure of Indiana Jones. A fedora-clad, Graeme Mason tells more on the movie and the game it spawned

How do you follow up a classic like *Raiders Of The Lost Ark*? The rip-roaring adventure featuring daring chases, mystic happenings and the ultimate bad guys (Nazis, we hate those guys), was a global smash, and the movie that transformed Eighties cinema and TV. A sequel was inevitable, and after three years of development and filming, another episode of the heroic adventurer Indiana Jones, played with charming insouciance by Harrison Ford, was unleashed. With a story once more concocted by Spielberg's friend George Lucas, scripting duties fell to the husband-and-wife writing team of Willard Huyck and Gloria Katz, with original scriptwriter Lawrence Kasdan (in an early pointer to *Temple Of Doom*'s general mood) allegedly displeased with the franchise's new direction. The film would be set prior to the events of *Raiders Of The Lost Ark*, and take place principally in India, although permission was denied by the Indian government to film on location and Sri Lanka was chosen instead. The negative image the movie portrays of the country are still felt by some in India today.

After seemingly escaping the clutches of a gangster in Shanghai, Indiana Jones (along with nightclub singer Willie Scott, played by future Spielberg spouse Kate Capshaw, plus the diminutive driver Short Round) finds himself halfway to Delhi and in a stricken village, its crops failed and children vanished since the theft of an ancient stone from the village's shrine. Unable to resist helping, Indy and his companions are drawn into the machinations of the ancient Thuggee cult and an evil God named Kali, the most infamous scene involving a grisly depiction of human sacrifice. In subsequent interviews, George Lucas attributed the movie's grim themes to his own divorce and Spielberg's separation from his then-partner. "Once we got out of our bad moods," Lucas told Empire magazine, "we kind of looked at it and went, 'Mmm, we certainly took it to the extreme.'"

Despite (or because of) the tabloid controversy over the gloomier tone of *Temple Of Doom*, the movie was a smash hit upon release. Critic Roger Ebert endorsed the film as, "One of the great bruised forearm movies… the kind of movie where your date is always grabbing your forearm in a vice-like grip as unbearable excitement unfolds on the screen," and awarded it four out five stars.

» [Arcade] Trapped on the bridge, our hero has one option left…

> **"Fortune and glory, Kid. Fortune and Glory…"**
> Indiana Jones

The NY Times called it 'exuberantly tasteless and entertaining' and drew attention to its classification certificate. Granted the traditional PG rating, *Temple Of Doom* skirted around the boundaries of the all-encompassing certificate, and is generally attributed into bringing about the creation of the PG-13 rating. Three months after its release, the Patrick Swayze action flick *Red Dawn* ushered in this new phase of age restriction in cinemas.

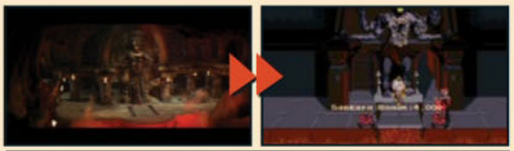
Having had great success with its arcade version of *Star Wars* (among others), Atari briefly considered a coin-op of *Temple of Doom*'s predecessor before settling on the second adventure, with the aim of releasing the game simultaneously as the movie hit theatres. At the time, LaserDisc technology was popular, thanks to *Dragon's Lair*, and Atari began developing games based on the format. Codesigner Peter Lipson takes up the story. "We went to ILM and toured the set while thinking of making our LaserDisc game based on the mine car sequence. We realised the movie had maybe eight minutes of effects and our game would need over an hour to have all the alternate tracks, so our budget would have needed to have been hundreds of millions dollars. That wasn't going to happen!" Around this time, Atari was also developing a family of games for operation with some new hardware, entitled System I – a system which allowed arcade owners to swap a part of the PC board instead of forking out for a new cabinet every time Atari released another game. "I moved *Temple Of Doom* over to that after redesigning how the flow of the game might work," Peter continues. "The disc would have been a first-person game – we changed it to the viewpoint in the game as shipped, and added the flow to fit the need of a videogame that required multiple levels."

Along with *Star Wars* designer Mike Hally, Peter and his team deconstructed the most

» [Arcade] The game features a difficulty setting, similar to *Star Wars*.

MOVIE TO GAME COMPARISON

How the game transitioned from the Silver Screen to the arcades

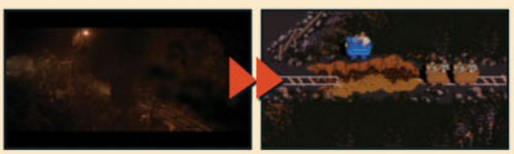


NABBING THE STONES

Having witnessed a horrific sacrificial ceremony, Indy makes his way down to the now-deserted statue where the three Sankara stones are resting. The scene is copied in part three of the arcade game, although the player can only take one stone at a time.

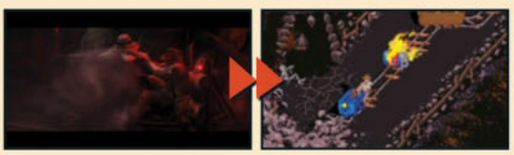
CONVEYOR BELT CHAOS

Unable to resist the screams of the kidnapped children, Indy takes on the Thuggee cult's main henchman in a battle hindered by repeated stabbings of his voodoo doll. After an intervention by Short Round, our hero regains his strength, just in time to turn the tables on the villain.



MINE CAR JUMP

As the movie approaches its climax, Indy and his friends escape via a hazardous mine car. Despite the advice of Short Round's new-found best mate ("Take the left turn, Indy!"), our heroes take the right path which leads to an uncompleted (or collapsed) section of track.



MINE CAR HOT FOOT

Having snapped off the mine car's brake handle, Indy resorts to using his feet to slow it down. It works, but the friction causes him to demand water, a request that is soon answered by Mola Ram. The game fails to replicate the tsunami, but as Indy declares, 'We walk from here.'

CUTTING THE ROPE BRIDGE

Trapped on a health-and-safety-nightmare rope bridge, Indiana Jones is faced with a stark choice – hack it to bits and take his chances or get sliced by swords. He chooses the former and the sequence is mirrored in the arcade game, once the player has collected all three stones separately.

NOW SHOWING: INDIANA JONES AND THE TEMPLE OF DOOM

ARTISTIC LICENCE

These weren't in the film...

SLIDING AWAY

■ We are pretty sure that the fun-loving Indy would have spent all day on these slides rather than bothering to rescue children. Fortunately, he avoided them in the movie, although they pepper the arcade game's mine levels.

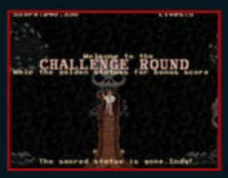
GOLDEN IDOLATRY

■ A golden idol famously appeared in the very first part of *Raiders Of The Lost Ark*, but there are none present in its prequel, certainly not in the mines. The game's bonus levels offers Indy the chance to collect multiple idols for big bonuses.

HAVE A HEART!

■ *Temple Of Doom*'s infamous sequence involves Mola Ram removing a victim's heart from his chest. However, at no point in the movie does he appear at random, chucking vital organs at poor Indy in the mines.

> **"Willie, Willie, Willie. What kind of a name is that? Is it short for something?"**
>
> Indiana Jones



▶ memorable scenes in the movie, or rather those memorable scenes that could be translated into a playable game. "We had the script, and we saw some of the film as it was in progress," says Peter. "It was obvious we needed to build the game around the whip, and because of the legacy of the LaserDisc idea, we wanted to include mine cars, too. For the first section, freeing the enslaved children was an obvious fit and the Escher-esque playfield design was there fairly early, because we couldn't do real 3D, yet we wanted the mine to have elevations to it." With the mine car level added to break up the 'walking' sections, a level set in the sacrificial chamber followed. "We added that to help define the flow through the game, plus it was such a key part of the film, it wouldn't have felt right to leave it out. Similarly, the rope bridge needed to be in, so we used that as a climactic end." After having rotated through three waves of the assembled levels, and recovered the trio of sacred stones, Indiana Jones is stranded on the primitive bridge, sword in hand, Thuggees on both sides and only one option left.

» [Arcade] The sacrificial chamber where Indy has to recover one of the sacred stones.

» [Arcade] Indy whips over a barrel to cover his escape.

Accompanying each level were excerpts from John William's score and speech quotes from the movie. "We had a new suite of audio software that ran on a second processor which was conceived and implemented by Rusty Dawe," recalls Peter. "One of the key things about it was that you could enter music in a notation form, specifying instruments and notes, which was a new thing at the time. To test it, Rusty used the *Charlie Brown* theme, so long before we had the chance to convert the real score, we were playing along with that in the background!"

The home conversions of *Temple of Doom* varied greatly in quality.

NOTABLE VERSIONS

ARCADE

■ Released shortly after the film debuted in cinemas, *Temple Of Doom* arcade proved a popular, if flawed, Atari film adaptation. Praised for following the movie closely and featuring voice clips that added greatly to its atmosphere, some sections are simply too frustrating for it to be considered a genuine classic.

ZX SPECTRUM

■ The inevitable monochromatic display and poor sound are bad enough for this conversion, alas, the Spectrum version of *Temple Of Doom* is let down even further by a particularly cramped playing area, poor scrolling and Indy's strange inability to whip diagonally – it's probably best to avoid this one.

AMSTRAD

■ You won't be wrong when you say that this looks remarkably similar to the Spectrum version. This one just includes a small dab of colour and some improved sound effects. Amstrad *Temple Of Doom* also performs a rather-faithful rendition of music from the film in the game's main gameplay screen.

COMMODORE 64

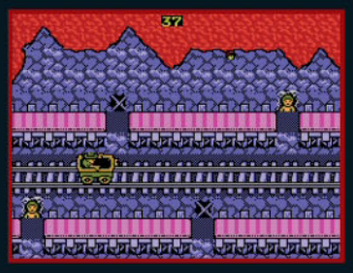
■ An ugly, flat display doesn't help endear the Commodore 64 port of the arcade game and the gameplay is similarly disappointing to boot. Being too difficult to win anybody over results in another lackluster conversion job from the likes of US Gold. The game's lengthy (multi) loading times don't help, either.

The NES version, designed by the same team, is the most diverse. "We wanted to keep elements of the coin-op," explains Peter, "and spent a lot of time trying to figure out how home play had to be different to the arcades. We were influenced by games like *Rogue* – we wanted a dungeon crawler, and the controller had a bunch of buttons, so we gave Indy a gun, dynamite and more stuff to do." The mine car sequence and mine levels themselves are merged, giving Indy the opportunity to wander between the two, collecting keys and solving basic puzzles. "I really like it," says Peter, "especially the idea of the lava monsters that had to be killed to make a path to the idol." Along with several other home versions, Mindscape published the NES game, while US Gold released the 8-bit home computer ports in the UK.

32 years later, and *The Temple Of Doom*'s reputation is not what it once was. Often derided for not having the 'feel' of the other movies, the very fact it tried to be different, had a darker tone, yet retained Raiders' constant rate of action marks it out as classic of the action movie genre. While you'd struggle to justify that epithet with the *Temple Of Doom*'s arcade game, there's no doubt it is one of the more accurate arcade film licences, and an enjoyable companion to the hit movie. Despite its poorly-received conversions, Peter has fond memories of the arcade original. "We were pretty happy with it. It might have been nice to include the plane crash as a skiing game, for example, but we had very tight constraints since the whole game had to fit on EPROMs, and they weren't cheap. I thought we captured the spirit of the movie quite well." ★

» [Arcade] Having escaped the clutches of Mola Ram, Indy is reunited with his friends, before it's off to the mines again.

» [Arcade] As in the movie, the possessed Maharajah pops up frequently to stab a voodoo doll of Indy and hinder his progress.

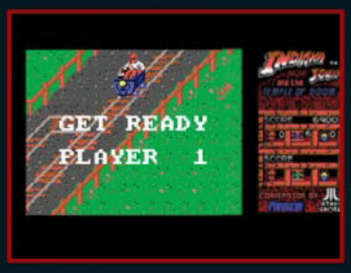


NES

■ Notably different from the other versions, the NES version was also developed by the team behind the arcade game. A bizarre colour scheme and plenty of incongruous gameplay mechanics – Indy is able to leap from mine car to conveyor for instance – make this an odd interpretation of the movie.

ATARI ST/AMIGA

■ While noticeably improved in the graphics and sound department, 16-bit *Temple Of Doom* still suffers from familiar gameplay issues. The push scrolling remains frustrating and Indy himself possesses a rather arthritic gait as he marches across each level. A disappointment from Mindscape.



DOS

■ Released belatedly in 1989, the DOS version of *Temple Of Doom* is quite adequate, graphically speaking, but it again replicates many of the flaws from the previous versions, despite coming after the other ports. The game does include a faithful rendition of the franchise's main theme in the title screen, however.

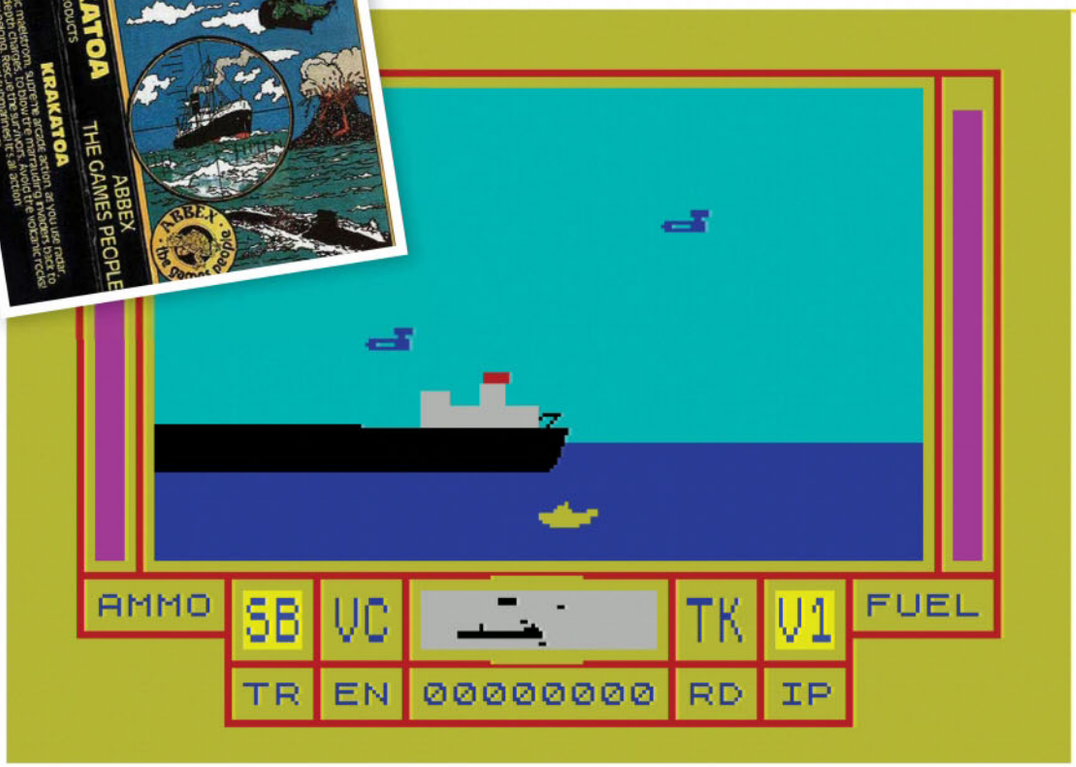
ABBEX ELECTRONICS

When thinking about the top publishers of the early Eighties Abbex Electronics isn't exactly one of the first names that springs to mind. But any company that brings E.T. to the Spectrum must have an interesting story, Kieren Hawken was sent to discover it

The early Eighties was like a field of dreams for budding software developers in the UK. The market was still so new, fresh and trying to find its feet it seemed like almost anybody could go out there and publish a game. They just had to decide which machine to back – which was probably the biggest problem of them all, as it seemed a new computer was arriving almost every month – and then come up with a game that people would want to buy, which, more often than not, was just a clone of whatever the hottest game in the arcades was at that time. Two people who took the plunge were Mark Nunan and Martin Ford, classmates at Middlesex Polytechnic, who found that they enjoyed working with computers far more than anything else. "I was doing a Business Studies degree at Middlesex University alongside a computing module," Mark recalls. "This led to me starting to write some business software programs for the Commodore PET. Another student called Martin Ford sold a couple of these packages to local businesses and proposed starting a business together. Our first company was called Micropower Business Applications, but we never sold another package, I was far more interested in the idea of games for the home computing market, so we set up another company just for that." Mark tells us that he financed this new venture himself, and we were inclined to find out how. "I had just completed my A Levels and I had done a couple of small money-making ventures, such as taking £500 of 25p crowns minted for Charles and Diana's wedding to Singapore, where I sold them for £2,000. They were made into paperweights for the tourist market, comfortably financing my trip there and leaving me some money to spare," he says.

» The original home of Abbex Electronics was a Mark Nunan's bedroom in this modest North London block of flats.

Abbex was formed in 1982 and we're sure that you're all wondering where the name came from. "It's actually not that interesting," Mark explains. "I bought Abbex straight off the shelf, so to speak, as a ready-made company with that name, but we decided that we really liked [the name] so [we] kept it." One thing that Mark had learned from his Business Studies degree was that getting the branding right was very important, so he set about trying to create an identity for his new company. "The logo was all about the hare and the tortoise, I identified with the tortoise, as I saw him as logical and shy, but relentless, whilst I resented the hare who was a bit of a cocky smart alec. So I made the tortoise cooler and faster with the help of one of the guys from the art school at the university. The baseball hat came from the USA where I had been in 1980. 'The Games People' strap line was something I came up with after [in order] to focus the brand on games, particularly getting it away from business computers and software." With the stuffy image of business software and hardware



removed from his new brand, Mark needed some people to make the games, because he knew that he would need far more software than it was possible for himself and Martin to produce themselves if Abbex was going to be successful. Advertising in magazines became crucial to this, as Mark remembers: "We spent a lot of time going through programmes that we were sent after placing adverts in magazines such as *Popular Computing Weekly*. There were literally hundreds of them, and an awful lot of very poor ones. But then there were also stars such as Paul Reynolds who, if memory serves, was only 15 when he produced *All Or Nothing*, which was definitely my favourite game we produced. Eventually we were working with up to 20 different programmers!" Another early recruit for Abbex was a man who would go on to become one of the industry's first real superstars: Vortex Software founder, Costa Panayi. Mark was very much in awe of his abilities. "Costa was an absolute star," he says. "When I first met him he totally blew me away. He was miles ahead of everyone else at that time and what he did on *Cosmos* in only 9k was truly amazing. He stopped any illusions I had that I could be a programmer myself, but at the same time showed me what was actually possible. I bought all his games afterwards and followed his career closely."

Advertising also proved valuable for selling Abbex games, too, as back in the early Eighties there were no large distribution networks for computer games – you had to work hard to get your products out there. "Very early on, advertising was the only way to sell games, particularly the wonderful *Popular Computing Weekly* which was fantastically productive," Mark gleefully reminisces. "We would receive loads of orders in the post every morning, usually with cash, which became an issue with the bank manager who could not understand how we got hold of so much cash with no retail outlet when we were students – it was hard enough even opening the account in those days!" But Mark was quick to point out that magazines were not the only outlet, as computer expos started to spring up all over the place. "At the same time, we started attending exhibitions which were becoming very productive. I remember one in Manchester in 1982 where we spent three days being handed £10 notes non-stop for *Faust's Folly* and *Cosmos*." But then the market changed almost overnight, the rise of new far more professional software companies such as Imagine, Ocean and Virgin started to set up massive distribution networks, software production plants and marketing departments. This was a move that Mark really didn't like. "It suddenly all got a bit corporate and we were selling games in WH Smith, Harrods, through distributors and 16 countries around the world. We moved to a three-storey office in Bedford, employed managers and

» [ZX Spectrum] Paul Reynold's *Krakatoa* is an interesting clone of *Choplifter* that adds some nice additional gameplay features.

INSTANT EXPERT

- Abbex released an unofficial version of the infamous Atari 2600 game *E.T.* for the Spectrum, called *E.T.X.*.
- **The company was set up using money earned from selling Charles and Diana wedding coins.**
- Costa 'Vortex Software' Panayi and David '*Starion*' Webb both worked for Abbex in the early years.
- **Abbex once got in a bust up with then-industry leaders Atari at a trade show in France.**
- The owners of Abbex also had another business selling portable computers such as the Osborne 1.
- **Paul Reynolds was only 15 years old when he programmed 3D adventure *All Or Nothing*.**
- Abbex republished several games by a small Luton-based software company called Work Force.
- **The company was originally run from Mark Nunan's bedroom in London before moving to Bedford.**
- Abbex's VIC-20 games are now so rare that they can't even be found in the definitive Gamebase 20 library.
- **The *Hare And Tortoise*-inspired logo was a reflection of owner Mark Nunan's personality.**

» When Abbex was still known as Micropower Buisness Applications it focused on the Commodore PET.

WHERE ARE THEY NOW?

MARK NUNAN

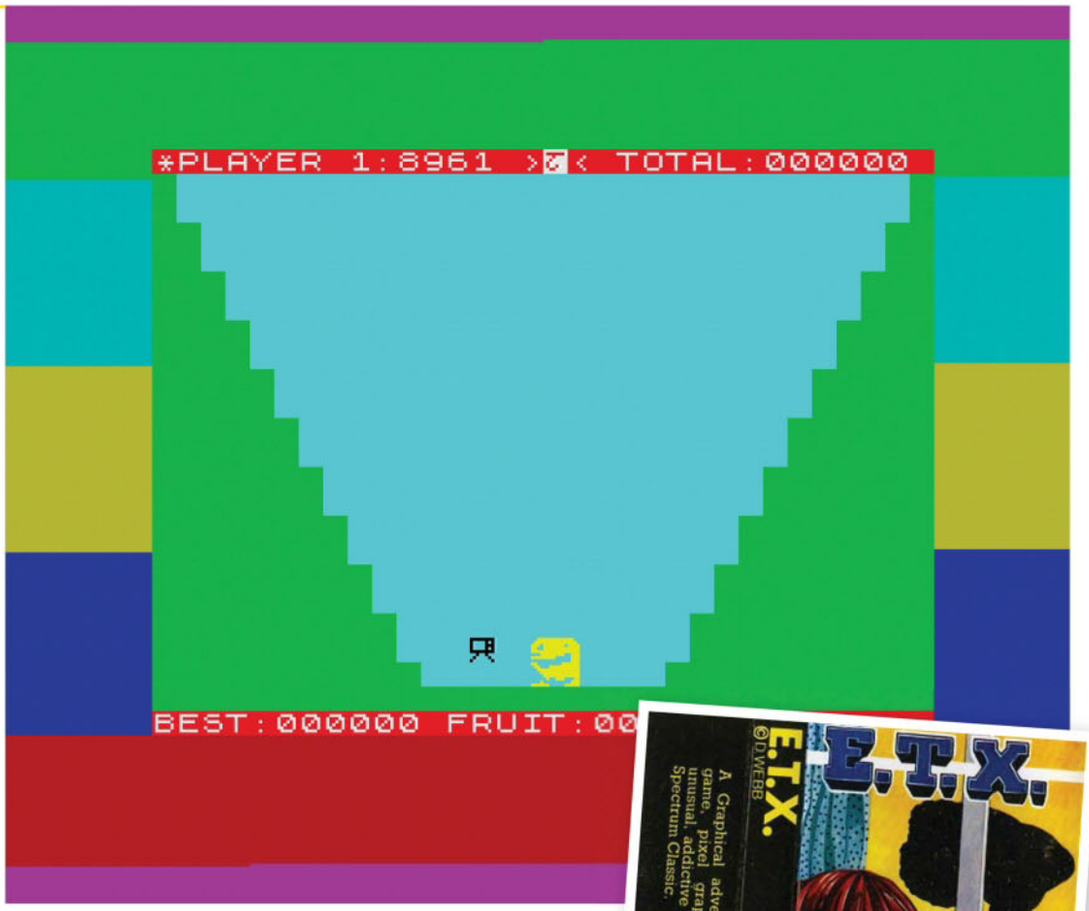
A serial entrepreneur, we found it easier to let Mark himself explain what he's done since founding Abbex. "I did a stint at the London stock exchange, traded bonds on Wall Street and became a corporate banker. That was not really 'me', though, so I set up a chain of restaurants in the city (Harry's Bar), started a publishing company, got into dance music and clubs and got into manufacturing by buying a failing French manufacturer of CHP systems. By 2014 I was manufacturing everything from compressors, car parts, beers pumps, screws and so on, but with a turnover of nearly £40m I felt the same as I did in the later days of Abbex – too corporate, no fun. So I sold everything except for my current company, Sarginsons Industries, which manufactures lightweight components for the automotive industry with a particular emphasis on electric vehicles."

COSTA PANAYI

Since he closed down Vortex Software in the early Nineties and left the industry altogether not much is known of Costa's career and he has become a total recluse. This is a great shame given how much he contributed to the UK games industry and the great success he experienced with games such as *Tornado Low Level* (*T.L.L.*), *Highway Encounter* and *Deflektor*. His last known position was as a design consultant for world-renowned toy maker Fisher Price.

DAVID M. WEBB

After his stint with Abbex David wrote successful books for both the ZX81 and Spectrum, including the bestselling *Supercharge Your Spectrum*. This led to being hired as a programmer by Melbourne House where he created groundbreaking 3D space-exploration game *Starion*. From here, his career took a very different direction as he first became an investment banker in London before moving to Hong Kong and becoming a world renowned stocks and shares analyst and a political activist. More can be found on his illustrious career at webb-site.com.



» [ZX Spectrum] You will be pleased to hear that although *E.T.X.* still features the dreaded pits from the 2600 game they are less frequent and easier to escape.

▶ stopped making any money. We actually looked at buying an office in Canary Wharf in 1983 but thought it was too far out and was too decrepit!"

It would be wrong to talk about a company who used the moniker 'The Games People' without actually talking about its games, and despite only being around for a relatively short amount of time, Abbex produced lots of them. Like many other companies of the era a large part of its library was made up of arcade clones, but there were a few great original titles in there too. Mark discuses his vision of what he wanted in this era: "I wanted a wide range of games as I was convinced people would want a broad selection to play," he says. "I also wanted to maximise the impact of our advertising without spending a lot of time developing new concepts. Great ideas were in short supply back then, so we decided to do similar versions of already very popular games – to be honest we were too naive to know much about copyright and didn't really worry about such issues. It was all a bit 'Wild West' then, with things moving so fast that if you didn't get on with things quickly it was too late, very much a case of 'don't think, just do'!" With titles such as *Asteroids*, *Spookyman* and *Missile Command* clone *War Game* under its belt, Abbex was skating on thin ice and hoping that the eyes of then industry leader Atari wouldn't become focused upon it. But it was actually another title it chose to copy from Atari that led Mark into a chance encounter with the American behemoth, a conversion of the infamous 2600 game *E.T.*, to be exact. We were interested to find out exactly how this came about, so we got Mark to fill us in. "In late 1983 [we] were sponsored by the government to go to the MIJID exhibition in Nice, France and represent the growing British home computer industry – unknown to Her Majesty, the exhibition was actually a subset of a pornography exhibition, which gave a rise to all sorts of new ideas for games which never came to fruition! We knew Atari was going to be there and one of our programmers had done a version of their new game. We launched the game in the UK with the idea of pulling it if Atari got upset. When we showed it to Atari they ignored us and didn't care. They went on to piss us off when we left our stand to talk to a *Daily Telegraph* journalist for a bit. Atari decided to move our stand and replace us with its own! We came back very confused and indignantly kicked them off, turning down the offers of cash. An hour later, a French TV crew appeared asking about Atari's games. Our French was not up to much but we showed them our version of *E.T.* which made them relatively happy, and I don't think Atari ever noticed!"

DEFINING GAMES

ALL OR NOTHING
ZX SPECTRUM, 1983

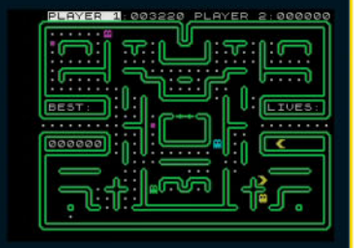
■ A game that was ahead of its time, not only did *All Or Nothing* feature impressive full-colour isometric graphics, but also highly advanced gameplay. Essentially an arcade adventure where you are trying to recover some secret files from an enemy camp and escape, *All Or Nothing* also features elements of stealth and strategy. As well as receiving positive reviews upon release, it was also voted the third best Spectrum game ever by *Your Sinclair* magazine – amazing when you consider that Paul Reynolds was just 15 when he coded it.

E.T.X.
ZX SPECTRUM, 1983

■ There is very little left to be said about Atari's 2600 game *E.T.* It's been called the worst game ever, the game that single handily caused the North American video games crash and been the subject of gaming's greatest ever urban legend – the Alamogordo, New Mexico landfill. But few people know that it was also converted to the ZX Spectrum, albeit unofficially. The Speccy port featured several improvements over the original including impressive digitised speech, game modes, new strategies and, best of all, not nearly as many annoying pits!

COSMOS
ZX SPECTRUM, 1982

■ Although he programmed several games before *Cosmos*, this was the one that really put Costa Panayi on the map. Initially released for the ZX81, it was the Spectrum where this *Star Raiders*-inspired space shooter achieved real success. The game shot to the top of the charts upon release and cemented Abbex's position as a producer of quality games. Receiving glowing reviews in the press, especially for being compatible with 16k machines, it was also released as *Astral Convoy* and received an PC remake in 2007 by Sinister Systems.



SPOOKYMAN
ZX SPECTRUM, 1982

■ It's harder to name an early-Eighties software house that didn't rip off *Pac-Man* than one that did. Namco's classic arcade game was so successful that it transcended gaming and became a part of pop culture in general, and it's legacy still lives on to this day. Of the many early clones for the Spectrum, *Spookyman* is definitely the best. It's very colourful and, thanks to being programmed in machine code, is also very fast too. In the April 1983 issue of *Sinclair User* the team declared it the best *Pac-Man* clone then available for the Spectrum.

» Tavistock House in Bedford was the second home of Abbex Electronics and saw it become a far more professional software publisher.

"We turned down Amstrad as no one had ever heard of them! So it didn't really seem like a big deal"

Mark Nunan

Worried that Abbex might get pursued by both Atari and Universal Pictures the decision was taken to add an 'X' onto the end of the title, the alien in Abbex's game was then christened 'Xagon' and the story was altered just enough to pretend it was a different game. The programmer of *E.T.X.* was David M. Webb, who would later go on to big things with Melbourne House and his game *Starion*. He vividly remembers how this opportunity arose. "Abbex had lent me an Atari console and basically asked me to do my own version Atari's game," he says. "I made a few changes but you can definitely see the similarities," he muses. "To this day I am very surprised that Abbex didn't get sued, but then as you probably know the Atari game was an epic flop for the company so perhaps Atari would have looked a bit silly suing us over an imitation." Previous to the release of *E.T.X.* David had already established himself as Abbex's key programmer with a host of successful games, so we were interested to find out what got him started in the industry. "My first programming was at school near York in about 1979, when the Parent-Teachers Association raised enough money to buy a second-hand Teletype terminal and a 300-baud acoustic-coupled modem, so a lunchtime club began. Via this modem, we got some time on the York University DEC-10, so we could learn and run BASIC, but there was no screen, just a printout and a punch-tape machine for storing the programs locally. My first standalone computer was a Sinclair ZX81 in 1981. I paid the extra £20 and bought it preassembled, rather than the kit, then I saved up and bought the 16K RAM pack. I bought a book to teach myself Z80 machine language and went from there. Abbex contacted me after some programs I wrote were published in a magazine."

David's first title was also the first game published by Abbex, *Pac-Man* clone *Spookyman*. But David wasn't actually a fan of Namco's hit title himself, "I had no love for *Pac-Man*, once I discovered programming, I didn't do much gaming," he laments. "Writing them was much more interesting and I just saw this game as a way to make money!"

Programming games and pushing himself further and further became the be-all and end-all for David. His chosen platform of choice was the ZX Spectrum and this brought about plenty of difficulties."The main challenges for any Spectrum programmer were to get as much mileage as possible out of an 8-bit, 48K, 4MHz machine, and in the Spectrum," he remembers. "You only had two colours per block of 8x8 pixels (foreground and background), which was a choice that Sir Clive made to save RAM. So the background on a game like *E.T.X.* had to be carefully drawn," he says. "Also, of course, the screen was only 256x192 pixels, so you had to be creative within that. If I recall correctly, *E.T.X.* also had some voice samples in it, which eat up RAM at an amazing rate." Speech actually became a trademark of Abbex's Spectrum releases, Mark adds just why that was: "We had published a very clever package called Super Talk that gave the Spectrum the ability to speak a pretty wide range of different words. We wanted to take advantage of that so started putting speech into our games to help promote it." Another one of

TIMELINE

1981

- Mark Nunan and Martin Ford initially form Micropower Business Applications to produce business software for the Commodore PET.

1982

- Deciding that videogames were far more fun, Abbex Electronics is set up alongside MBA to produce games for the new home computers just being released.
- Abbex releases its first game: *Spookyman*, a *Pac-Man* clone for the ZX Spectrum.

1983

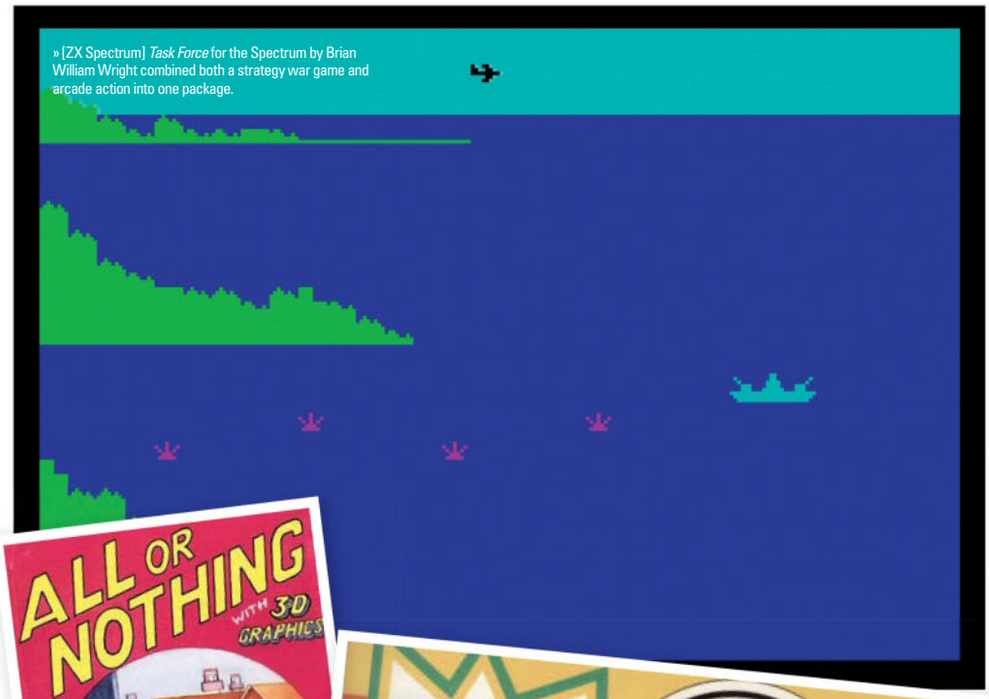
- Leaving Mark's bedroom in London behind, Abbex moves to proper offices in Bedford and expands greatly.
- The company branches out into making games for the Commodore 64 and VIC-20 with less success.

1984

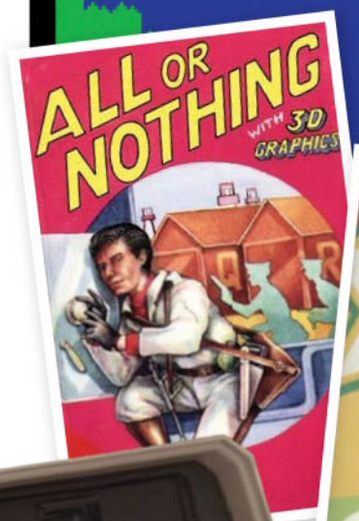
- *All Or Nothing* is released for the ZX Spectrum to great acclaim boasting both 3D graphics and speech capabilities.
- Abbex signs a deal to produce the launch games for the new VTech Laser computer, choosing VTech in favour of Amstrad.

1985

- After the VTech Laser launch turns into a total mess, Mark decides to cut his losses and sell Abbex Electronics to Prism Leisure and leave the games industry.



» [ZX Spectrum] *Task Force* for the Spectrum by Brian William Wright combined both a strategy war game and arcade action into one package.



Sensational Spectrum Games
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ABBEX the games people
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WAVE AFTER UNRELENTING WAVE OF ZENOPHOBIC ALIEN ATTACK, INTERSPERSED WITH EVER MORE FREQUENT ASTEROID + COSMIAD RAIDS. THE TWO COMBINE INTO AN UNENDING RAIN OF DEADLY DEBRIS. WITH RADAR,
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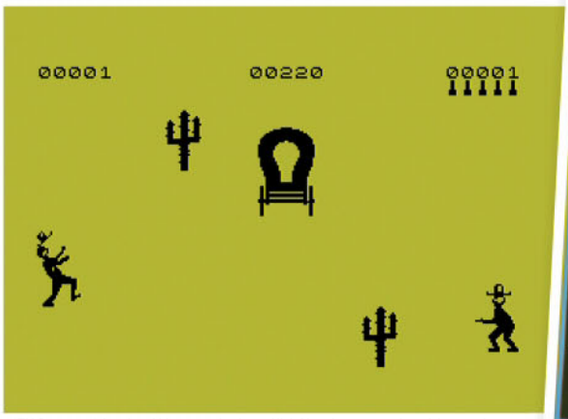
» Mark saw the potential in portable computing, however his ventures into the industry were not successful.



[ZX Spectrum] Another Abbex arcade clone, *High Noon* is a conversion of the popular Midway coin-op *Gun Fight*.

Abbex's earliest hits was Costa Panayi's *Cosmos*, the game had already been published independently for the ZX81 but Costa felt he needed help to get the Spectrum version out there, so he turned to Abbex. "The timing of *Cosmos* was atrocious, the Spectrum has just appeared on the scene and sales for ZX81 games were as flat as a pitta bread," he says. "So I quickly converted the game to the 16k Spectrum and sold it on hoping to make my money back."

So what went wrong for Abbex? Well, the key moment in its history was when Mark turned down a development deal with Amstrad in favour of a similar offer from Hong Kong electronics giant VTech. We turned to Mark to explain further. "We were contacted by a number of different companies with regard to creating ranges of games for new computers that were about to be launched," he says. "This was not really what we did, but VTech was a huge company that had a really solid computer called the Laser, which they were proposing to sell at a price point that we thought would blow the market wide open. So we agreed to write six games for VTech. The computer they proposed selling was way above the price they told us and did not have the spec we were given either, it was murdered by the Oric and many others. I believe I still have the only games that were ever written for a computer that was never sold! We turned down Amstrad as no one had ever heard of them! We had so many approaches from different companies, so it was only much later on that we realised what we'd done. Sadly I never talked to Alan Sugar directly, maybe he would have persuaded me differently." So was this the end of Abbex? "Yes and no," Mark continues. "We lost a packet on that venture, but for me it was all becoming too corporate. I never went into computer games with an idea that it would become a nine-to-five career, it was meant to be fun. We had staff, offices, and budgets so we were not making a fortune and it was very stressy. They were also companies coming into the market with massive marketing budgets and proper capital. For me the buzz had gone and I was moving onto to other things. So I sold the company and left to tour the world. I cannot remember who we sold to, I just know that I was bored with the whole deal and wanted to move on – the managers, Martin and common sense had taken over and no one was on my side anymore. They failed to understand that we needed to be bold to stay ahead – this is one reason they went all safe with clones of popular games and just milking what we had." So what would've Mark done differently in hindsight? "Probably everything!" he exclaims. "I should have put *Cosmos* onto 48K, locked Costa Panayi up somewhere safe, not done the clone games and spent more on marketing. But it was fun and I learnt a bundle, including the fact that anyone can do anything!" But what was Mark most proud of? "Just doing it," He exclaims. "In retrospect it was [mad] that I should start a company at university, but ignorance is a virtue sometimes. I try to keep that approach with everything I do!"

Special thanks to Mark Nunan, Davis M. Webb and Costa Panayi.

MICROPOWER BUSINESS APPLICATIONS

Before there was Abbex, there was Micropower Business Applications – a company that Mark Nunan and Martin Ford set up to initially sell business software for the Commodore PET computer. However, after releasing just one package they wrote themselves, Mark and Martin decided to take the company in a slightly different direction. They believed that the future of computing was in portability, a prophecy that eventually turned out to be true. We'll let Mark explain his vision to us, "MBA actually evolved into an agent for the first portable computer in the UK, the Osborne and, laterally, the Newbrain, the original BBC computer. I really thought that portables were the future of business computing. Although at 24lbs the Osborne was not overly portable, we still sold quite a few of them, though!" You could certainly say that MBA was very much ahead of the curve with computing, unfortunately the hardware of the time just didn't really meet the requirements.

DNA OF ABBEX ELECTRONICS

SOUNDING OFF

One of Abbex's key releases for the Spectrum was a package called Super Talk that gave your computer the ability to speak to you, much like the Intellivoice. This program was utilised within many of its games to impressive effect giving them a real point of difference over the competition. Abbex was also big supporters of the innovative Currah uSpeech device too.

ATTACK OF THE CLONES

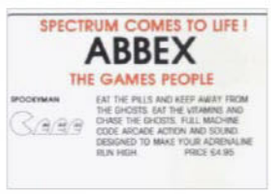
Clones of arcade games became a big part of Abbex's library. Although this was common for most software publishers of the time, Abbex took special care with its clones, producing competent versions of coin-op classics such as Midway's *Boot Hill*, Namco's *Galaxian*, Taito's *Space Invaders* and Atari titles including *Asteroids* and *Missile Command*.

RISKY BUSINESS

As well as Abbex, Mark Nunan and Martin Ford also owned another company, called Micropower Business Applications, with the mission of bringing portable computing to the masses. Although the technology wasn't ready at the time, the team saw that one day portable computing would be a big thing and were proved right with the rise of laptop computers and powerful tablets.

BRITAIN'S GOT TALENT

Always on the lookout for new programmers, Mark Nunan scoured magazines and type-in listings for signs of talent and discovered Costa Panayi and his game *Cosmos* for the ZX81. He then set about taking his talents over to Abbex alongside David M. Webb who would go on to great things with Melbourne House and his 3D masterpiece *Starion*.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MAILSTROM

In the earlier years of home computing, UK mail order was all-important and the way most companies sold their games. Abbex advertised heavily in popular computing magazines such as *Personal Computer Weekly, Sinclair User* and *Your Spectrum* – a move that really paid off as the cheques, postal orders and even some crumpled cash came rolling in.

WAR

The name Warcraft is one of the most significant titles in gaming, having altered genres a number of times. Adam Barnes explores the history of a franchise that made Blizzard a household name...

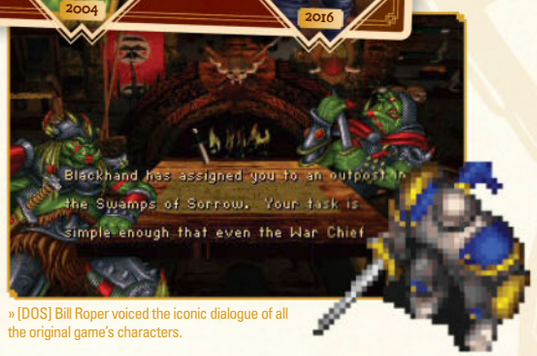
Among the great games of the industry there's often a common theme running through the teams that make them: determination. While it's true many of the best, most recognisable games of yesteryear all required a large amount of talent, a touch of innovation and more than a little bit of luck, it was the determination to achieve what these developers set out to do that really stood them apart. We've often mentioned Blizzard in these pages before, and while you may not know every little detail of its history, you'll likely know that its founders, Michael Morhaime, Allen Adham and Frank Pearce, were driven to create something special when they founded the company in 1991. As Silicon & Synapse it began working on its own games and these initial titles, particularly *The Lost Vikings* and *Rock 'N' Roll Racing*, proved that the team was going to be a force to be reckoned with. But this isn't the story of Blizzard; this is the tale of one of the most popular worlds in the history of videogames. This is how Azeroth was born, and *Warcraft* with it.

» [DOS] *Warcraft* introduced a number of elements to RTS games that remain true to this day: such as fog of war.

It begins, as so many of Blizzard's titles have, with someone else's idea. It sounds discrediting to say, but throughout the company's history it has taken novel ideas in videogames and – as one developer would come to tells us – 'Blizzard-ify' them. "The team was excited after playing games like *Herzog Zwei* and *Dune II* and wanted to bring something new to the table and deliver a highly-polished product," says Bill Roper, senior producer at the-then newly-renamed Blizzard. Bill wasn't present at the company when the idea to tackle the RTS genre was first conceived in 1993, instead joining in June of 1994 to help produce

the title that would come to define the developer. "When I joined the company, the core of the game was designed and was up and running," Bill tells us. "From a design perspective, the idea was to take the gameplay loop of base building, unit training and battle and destroy, and enhance the experience in terms of adding a lot of story, characters, and multiplayer." Bill goes on to add that the company wanted to make something that was as fun as it was "easy to play", while still retaining "a lot of depth for core gamers". This would come to be a defining feature of Blizzard's titles, taking elements of other games and reworking them to enable a wider audience than just the subset of 'hardcore' players that were devoted to gaming. "We also had the crazy goal of selling 70,000 copies," Bill adds.

While Blizzard's competitors, Westwood, was working hard on *Command & Conquer*, one employee allegedly left to join Blizzard, leading to a sharing of ideas that ultimately led to a rivalry – however amicable – between the two RTS developers. The idea wasn't to copy, however, but instead to improve, and there was one area that Blizzard knew would be integral to its *Warcraft* experience: its story. "On my first meeting with Allen Adham he asked if I was a writer," explains Bill. "I told him yes, and, in fact, I wrote the script of the CES trailer for the game. He told me that all they had for *Warcraft* at that time was a very high-level concept – that Orcs and Humans were fighting and that the main guy's name was Blackhand." Bill was given the opportunity to craft the story and lore for Blizzard's brand-new fantasy title, a role that his childhood as a gamemaster in tabletop role-playing games had prepared him for. "Allen knew story was important," he adds, "and he put a lot of trust in me to take on the responsibility for crafting it for the game."



» [DOS] Bill Roper voiced the iconic dialogue of all the original game's characters.

HEROES OF WARCRAFT

The characters that you want fighting on your side

MAGUS MEDIVH

First appearance:
Warcraft: Orcs & Humans

As one of the longest running characters in the franchise's history, Medivh's own bio is far too long to detail. The most significant thing to know is that – under the control of the demonlord Sargeras – it was Medivh that opened the Dark Portal and allowed the Orcs to enter Azeroth in a bid to destroy the Human race.

Strength	Importance	Magic	Evilness
3	9	9	6

THRALL

First appearance:
Warcraft III: Reign Of Chaos

As the son of Durotan, Thrall led the Horde at the launch of *World Of Warcraft* before turning to shamanic arts at the release of *Cataclysm* in a bid to save Azeroth. His decision to declare Garrosh Hellscream as Warchief resulted in the storyline focus of a whole expansion. His importance has since dwindled in favour of newer Horde figures.

Strength	Importance	Magic	Evilness
6	8	7	1

ARTHAS MENETHIL

First appearance:
Warcraft III: Reign Of Chaos

The noble Prince's drive for vengeance against the Burning Legion as it tore his would-be kingdom apart led to his undoing when, in seeking a way to defeat the demonic forces, he uncovered the cursed sword Frostmourne. The blade twisted his soul, turning him into the villainous Lich King who would come to lead the Undead forces.

Strength	Importance	Magic	Evilness
8	2	9	8

SYLVANAS WINDRUNNER

First appearance:
Warcraft III: Reign Of Chaos

Once upon a time Sylvanas was a high elf until she was forced into obedience by The Lich King, before breaking free and becoming leader of the Forsaken contingency of the Horde. She's flitted in and out of the storyline with varying degrees of significance, but in the latest *WOW* expansion pack she stands as Horde Warchief.

Strength	Importance	Magic	Evilness
5	6	7	5

EVOLUTION OF HUMANS

Warcraft wasn't the only game that Blizzard was working on at the time, but it was the first title that the company was preparing to publish itself, and in that sense there was a lot riding on its release. Particularly since this was still a young company, and it didn't have the vast resources it has today. "Glenn's office was a converted closet space because it was the quietest spot in the office," says Bill of the audio recording setup for the company. "He had a small desk in front of him and another behind him so he could have space for his midi keyboard, a mixing board, and his computer. There were speakers jammed in there as well, so whenever I went in to do voiceover, we'd have to sit shoulder to shoulder with a microphone propped in front of me while he sat perfectly still and silent."

» [DOS] *Warcraft*'s sequel was a much slicker game, bringing over improvements seen in *Command & Conquer.*

For Blizzard, *Warcraft* was to be its flagship title, a game that would prove what the company was capable of doing when it was free from the restraints of a publisher. It was imperative, then, that it made a clear statement about what a 'Blizzard' game was. This would come to mean three things: first, that the game could be played by an audience of non-core gamers; secondly, that it implemented a more intricate and detailed storyline; and thirdly, that it maintained a sense of style and humour. It was with these three ideals that the game was designed, and by November 1994 *Warcraft: Orcs & Humans* was released on DOS. Reviews took a while to appear, but they were commonly among the higher end of the scoring scale, praising the approach that Blizzard had taken with the genre. *Warcraft* was a success, going on to sell over one million copies.

The immediate success energised not only the *Warcraft* team, but Blizzard as a whole. The company had taken a risk to publish a game in a untested genre and it had become vindicated for doing so. It was clear a sequel would be needed, and so work on *Warcraft II* began in February 1995. "There was a lot of debate about what we were going to do in *Warcraft II*," says Bill. "I remember a group of us talking about what the story should be. There was an idea of a portal opening between the lands of Azeroth and modern-day Earth. The opening was going to show a pair of pilots flying F-16s, trying to track down an unidentified bogey in the area. Suddenly, a rift opens in the air above them and a dragon comes through, destroying one of the planes.

1991

Silicon & Synapse is founded by Michael Morhaime, Allen Adham and Frank Pearce and began by developing ports of games.

1994

The company's name is changed to Blizzard Entertainment after it was acquired by distributor Davidson & Associates.

Blizzard's original *Warcraft* RTS game is released for MS DOS, with the full title of *Warcraft: Orcs & Humans.*

SARGERAS

First appearance:
None, yet...

A demonic titan god who created Warlocks, the Burning Legion and every threat to not only Azeroth but the whole of *Warcraft*'s universe. He hopes to destroy every facet of life, making him the sort of unquenching villain that a fantasy title like this really ought to have. He's appeared throughout the franchise's history, but never as a boss.

Strength	Importance	Magic	Evilness
8	9	9	10

UTHER THE LIGHTBRINGER

First appearance:
Warcraft II

Uther was the first Paladin of the Knights Of The Silver Hand, and led the battle against the Orcs in the Second War. He was betrayed by Prince Arthas after he became the Lich King. In the latest *WOW* expansion, *Legion*, Holy Paladin players can seek Uther's holy weapon and wield it themselves in the fight against evil.

Strength	Importance	Magic	Evilness
8	4	5	1

KHADGAR

First appearance:
Warcraft III: Reign Of Chaos

He has long been one of the most significant Archmages of the Alliance and has been called upon time and again to assist in saving the faction from the brink of defeat. Though his allegiance is steadfast, he fights as much for the salvation of Azeroth as a whole than any one particular race. He's a familiar face for both Alliance and Horde players.

Strength	Importance	Magic	Evilness
2	10	8	3

GUL'DAN

First appearance:
Warcraft III: Reign Of Chaos

The original *Warcraft* states that the Orcs invaded Azeroth from their homeworld thanks to this warlock creating a portal to the Human lands. In recent times he's played the villain again, aiding the Burning Legion rather than the Horde. Both *Warlords Of Draenor* and *Legion* featured Gul'dan as the catalyst for the overarching threat to Azeroth.

Strength	Importance	Magic	Evilness
3	9	9	9

"We stood on each other's shoulders, making each of our games better"

Bill Roper

A dogfight ensues, and we pan down to a battlefield where orcs are battling soldiers. Mages versus rocket-launchers, warriors engaged in close quarters combat with foot soldiers. Crazy stuff!"

Such ambition never came to pass, and the team at Blizzard settled on retaining the fantasy setting, expanding the world and its lore with something more concrete. There were gameplay improvements, too, such as the addition of naval and air units, improved AI, an increased multiplayer count to eight, and even a map editor for players to create their own scenarios – a feature that would become extremely popular in the RTS genre.

Yet, despite *Warcraft*'s success, the developer couldn't rest on its laurels. The rivalry between Westwood and Blizzard was well documented, even at the time, with both teams watching each another to discover the progress that either studio was making. Blizzard was first to the punch with its original *Warcraft* game, with *Command & Conquer* following almost half a year after in 1995. Then it was *Warcraft II: Tides Of Darkness* in August 1996, while Westwood followed with *Red Alert* in October of the same year. This was a familiar pattern over the ensuring years, the two taking it in turns to innovate and improve. The RTS boom was born from this intense competition, and the likes of *Total Annihilation*, *Age Of Empires* and so many more would quickly begin to fill the market with their own individual takes on the templates set by Blizzard and Westwood. "I think it was that rivalry between the two teams that drove the genre to such great heights so quickly," suggests Bill. "We stood on each other's shoulders, making each of our games bigger and better because the other was challenging us."

The pace didn't hold up from there, either. The need to get something new out quickly lead to Blizzard's first expansion – following in the footsteps of the pattern created by Westwood – hiring third-party developer Cyberlore Studios to create *Beyond The Dark Portal* for *Warcraft II*, which expanded the gameplay with new single-player missions for both factions, properly prototyped the concept of 'hero' units and expanded a part of the lore that would later become extremely important for the franchise.

» [DOS] Naval units were originally going to be added to the first game, but were never fully implemented.

It was at this point that the first attempt at bringing the franchise out of the RTS genre began when, in 1996, an adventure game was put into development. It was a 2D black comedy point-and-click title set in the *Warcraft* universe, and creation was split between Blizzard and Russian animation studio Animation Magic. Much of the game was in place by 1998 with the story, voiceover, puzzles and animations pretty much ready to release. Issues arose when miscommunication with Animation Magic led to delays on the game that was due to be titled *Warcraft Adventures: Lord Of The Clans*. With LucasArts releasing *The Curse Of Monkey Island* and simultaneously announcing its new generation of fancy 3D adventure games with *Grim Fandango*, Blizzard

1995

A sequel is released – *Warcraft II: Tides Of Darkness* – for DOS and Windows, months before Westwood releases *Red Alert*.

1996

Warcraft's first expansion is released. Into The *Dark Portal* detailed a storyline that the entire story of the game is built from.

1998

Blizzard officially announces the cancellation of its 2D adventure game, *Warcraft Adventures: Lord Of The Clans*.

1999

Warcraft II: Battle.net Edition combines the base game and expansion pack with the launch of Blizzard's network system.

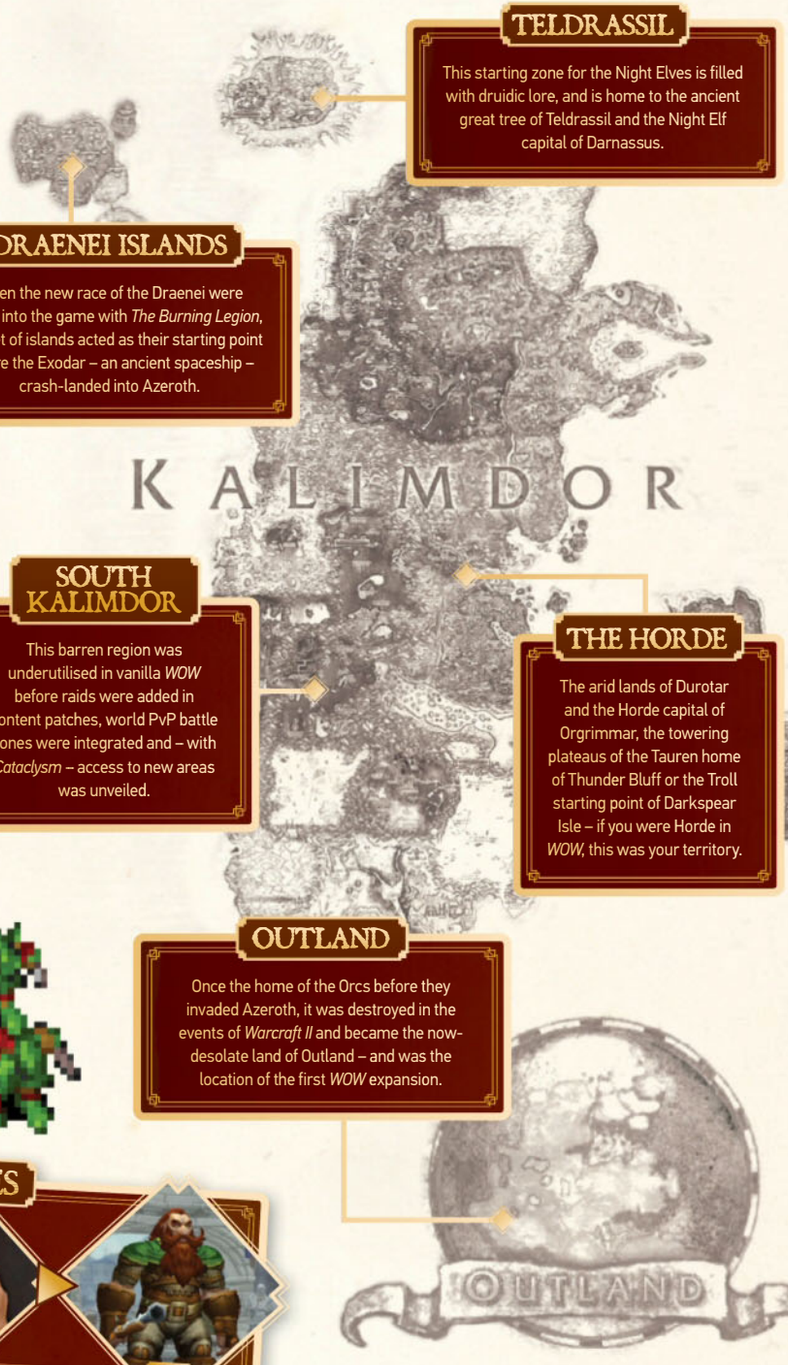
» The depth of *Warcraft*'s lore is staggering, as highlighted by this excellent imagery.

felt its delayed *Warcraft* adventure title just couldn't compete and canned the project in 1998.

This wouldn't be enough to deter the franchise, however. With *StarCraft* shooting up the charts and proving its worth as a multiplayer title in Asian markets, suddenly Blizzard was in a position of strength in its ongoing battle with Westwood. It had the freedom to once more innovate, it let its *Diablo II* RPG take pole position for the company, and spent a few extra years on what would become the third *Warcraft* title. The embarrassing cancellation of *Lord Of The Clans* had been a public affair, therefore Blizzard needed to spin something positive: the announcement was made in 1999 not long after development began in 1998, with the studio initially terming it a 'role-playing strategy' game, developing on stronger hero units, first seen in *Warcraft II,* as the core new gameplay draw. These characters drove the story, but most important was how these hero characters could level up over the course of either the single-player campaign or during a multiplayer match. This feature was also the base mechanic for the *Warcraft III* mod, *Defence Of The Ancients,* that would later give birth to the MOBA genre. This one new mechanic not only changed the way RTS games played at the time but, nowadays, has ultimately managed to replace the RTS genre entirely. While the same core RTS gameplay of resource management, unit creation and base destruction remained unaltered, Blizzard had still found even more ways to innovate: a 3D environment and the gameplay mechanics that came with it, the RPG-style units and its associated looting system and even tweaks to the way different factions played.

VISITOR'S GUIDE

Any tourist wanting to peek into Warcraft's, erm, world, may want this handy map...



TELDRASSIL

This starting zone for the Night Elves is filled with druidic lore, and is home to the ancient great tree of Teldrassil and the Night Elf capital of Darnassus.

DRAENEI ISLANDS

When the new race of the Draenei were added into the game with *The Burning Legion*, this set of islands acted as their starting point where the Exodar – an ancient spaceship – crash-landed into Azeroth.

SOUTH KALIMDOR

This barren region was underutilised in vanilla *WOW* before raids were added in content patches, world PvP battle zones were integrated and – with *Cataclysm* – access to new areas was unveiled.

THE HORDE

The arid lands of Durotar and the Horde capital of Orgrimmar, the towering plateaus of the Tauren home of Thunder Bluff or the Troll starting point of Darkspear Isle – if you were Horde in *WOW*, this was your territory.

OUTLAND

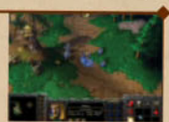
Once the home of the Orcs before they invaded Azeroth, it was destroyed in the events of *Warcraft II* and became the now-desolate land of Outland – and was the location of the first *WOW* expansion.

EVOLUTION OF DWARVES

2002

Blizzard's first 3D RTS, *Warcraft III: Reign Of Chaos*, is released to huge success.

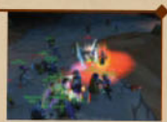
2003



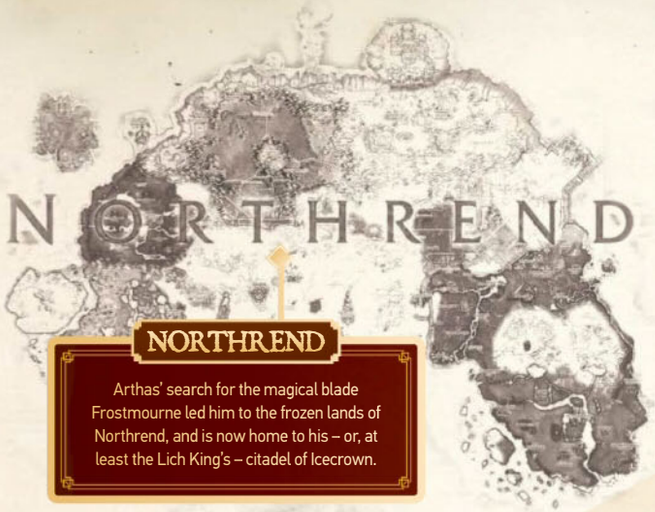
Blizzard releases an expansion for *Warcraft III* titled *The Frozen Throne*, and continues the story of Arthas Menethil.

Defense Of The Ancients – a scenario created in *Warcraft III*'s map editor – is released, spawning the MOBA genre.

2004



The MMO genre is given a boost as *World Of Warcraft* officially releases after months of beta testing.



NORTHREND

Arthas' search for the magical blade Frostmourne led him to the frozen lands of Northrend, and is now home to his – or, at least the Lich King's – citadel of Icecrown.

BROKEN ISLES

These islands were added in the latest expansion, *Legion*. There's plenty of lore crammed in here, and it is also home to the Tomb Of Sargeras.

RUINS OF LORDAERON

Areas such as Hillsbrad and Lordaeron were mission locations in the original RTS games before they became the Undead starting zone in *World Of Warcraft*.

DEEPHOLM

There was speculation that this Maelstrom would be utilised for the Naga home of Azshara. The Maelstrom actually led to Deepholm, from where Deathwing – a world-destroying dragon – emerges in *Cataclysm*.

THE ALLIANCE

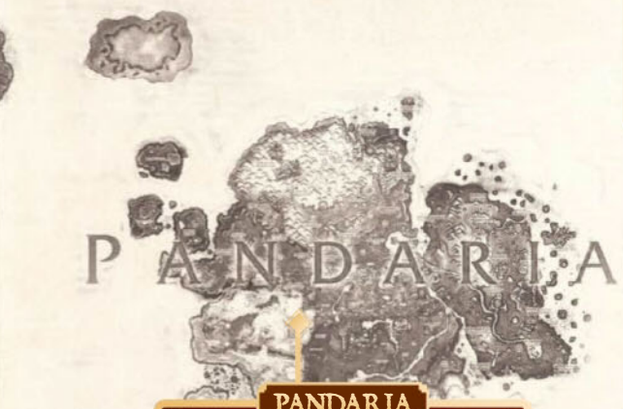
The capital cities (and starting points) of Stormwind (Human) and Ironforge (Dwarf) can be found in this region, the two close enough to be connected by an underground train line.

JUNGLE OF STRANGLETHORN VALE

This was one of the largest areas in *WOW*, themed on the troll tribes. It was once upon a time a breeding ground of PvP campers who would never let you quest in peace.

THE DARK PORTAL

Situated in a basin in the southeasternmost corner of the Eastern Kingdoms, this portal was the very same one the Orcs first used to invade Azeroth – and was later reactivated for *The Burning Crusade* expansion.



PANDARIA

The native homeland of the Pandaren was once shrouded in fog, uncovered with the release of *Mists Of Pandaria*. Its atypical of *Warcraft*, styled on Asian architecture and themes instead of the usual fantasy fare.

DRAENOR

The time-travelling antics of *Warlords Of Draenor* allowed players to return to Outland prior to its destruction, and relive a lot of the franchise's history.

2007

WOW receives its first expansion pack, *The Burning Crusade*, a lengthy three years after the base game's release

2008

Arthas Menethil returns with the second expansion pack, *Wrath Of The Lich King*, and is regarded as the peak of the *World Of Warcraft*.

2010

World Of Warcraft is revamped with the release of *Cataclysm*, with original zones being altered to entertain veteran players.

» The film wasn't received well on our shores, however it did find an audience in China.

WARCRAFT: THE MOVIE

The franchise has recently invaded a new medium...

It's a surprise it had taken this long to create, but in 2016 – after years of speculation and fan demand – a *Warcraft* movie was finally released. Directed by *Moon* director Duncan Jones, it wasn't especially well received critically with many complaining about the film's inability to deliver a deep narrative. In fact, with a Metascore of 32, it's hard to see *Warcraft* (the movie) as a critical success at all. Fans, however, have been far more forgiving, and those who have been a part of the universe for its more than 20 years in existence will likely have had something to gain from it, and an IMDB rating of 7.1 or the $156 million it's earned in China is perhaps a better testament for how successful it has been. Blizzard founders were present at the premiere – despite having since left the company – and, alongside Duncan Jones, reiterated that this was a film for the fans and the fans alone. It was a tough undertaking for any director, but Jones has been a self-professed fan of the franchise since its early RTS games, and by only tackling the opening of the Dark Portal and the Orcs entering into Azeroth – a mere slither of the lore available for the series – the film could introduce newcomers who hadn't yet experienced the world of *Warcraft* in any form.

» [PC] *Warcraft III* blended RPG systems with RTS sensibilities, and it performed well critically and commercially..

Warcraft III was a success in every way possible for Blizzard. The game released in July 2002 for PC, with its expansion – *The Frozen Throne* – coming a year later. In terms of its storyline the two releases were by far and away the most important for the franchise yet, drawing its increasing fanbase further into the *Warcraft* setting and lore – however, Azeroth was about to get a whole lot bigger. Less than a year after the release of *Warcraft III*'s expansion pack, *World Of Warcraft* was released – which surely needs no introduction.

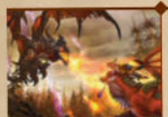
"I was on the *Project Nomad* team," says Kevin Beardslee, the man who would later become the key reason that development on *World Of Warcraft* started. *Nomad* wasn't tied to *Warcraft* in any way, instead it was squad-based tactical action-RPG. "The project wasn't really going anywhere," he adds, claiming that this was mostly down to a lack of direction. "Some time in there the *EverQuest* beta had come out and a lot of us were playing that," he explains, "and we jumped to *EverQuest* once it launched." The MMO had hit the world by storm, popularising the genre and gathering 500,000 subscriptions. "*Nomad* was not really making any headway so I said, 'Hey, why don't we do an *EverQuest,* but Blizzard style?' So I told that to the other artists on our team, and Bill Petras. He said, 'Go pitch that to the lead programmer on our team, and he can pitch it to management.'"

» An early look at *WOW* in 1999, in the placeholder town of Valguard – though almost of none of this version's code exists in the final game.

Kevin put together his ideas on a notepad and immediately went to pitch it. The idea was really simple: take *EverQuest*'s gameplay and broaden its scope, make quests noticeable, give combat a 'punch' and make it easier to play, add in instanced dungeons so everyone could have a chance at the bosses and produce a game with the visual quality that Blizzard was already known for. "It wasn't just *World Of Warcraft,* either," adds Kevin. "I pitched *World Of Warcraft* or *StarCraft.* I wanted to leverage one of the Blizzard IPs, it didn't matter which. I pitched the idea of *EverQuest* but done Blizzard-style. Jeff Strain [lead programmer on *Nomad*] pitched it to management on Wednesday and by Friday they cancelled *Nomad* and we started on *World Of Warcraft.*"

The decision ended up leveraging *Warcraft* instead of *StarCraft* for two reasons. Michael Morhaime believed the team could utilise the same assets as the *Warcraft III* team, which was also in development at the time. Additionally he believed there was "more canon, more stuff to draw from". Blizzard purposefully

2010

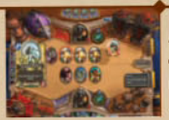


The popularity of *World Of Warcraft* peaks with Blizzard revealing that its MMO has 12 million subscribers. The game would never reach those dizzying highs again...

2012

After a decline in subscribers due to criticism of changes made to *WOW* for a more casual audience, *Mists Of Pandaria* is released to much resistance.

2014



Hearthstone is released, a simplified collectible card game that utilises many *Warcraft* characters, abilities and creatures as its cards.

» [PC] *World Of Warcraft* let players explore locations in greater detail, compared to its RTS prequels.

» The earliest existing screenshot of *WOW* using the *Warcraft III* engine, showing its humble beginnings.

"We didn't know if it was going to last, so Mike would bring on one server at a time"

Kevin Beardslee

kept the *WOW* team small, reducing the cost of the development as they designed the core elements of the game. The team started by building out a single zone to tweak and adjust every aspect of the game, from combat to the pacing of quests and even its look. "We basically got Elwynn Forest working exactly the way we wanted," states Kevin, "you know, the number of wolves to kill, the number of candles to collect and all that before we then brought some more people up from customer service or quality assurance to start building Westfall, Redridge and Darkshire."

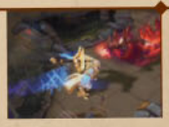
With everything set in stone, the team size ramped up significantly. Azeroth needed to be huge, and Blizzard needed all the hands it could get if it was to ever release the game. Development rolled on for roughly five years, and at no point was it a guaranteed success. "There were times when Vivendi wanted to sell us and Microsoft had an offer of $700 million to buy Blizzard," says Kevin, adding a failed counteroffer by Vivendi deterred Microsoft. As it turns out Microsoft missed out: *World Of Warcraft* launched to immediate success in 2004. "We didn't even have enough boxes [for the midnight launch]," Kevin tells us. "At one point at 3am somebody drove back to Blizzard to bring back the employee versions of the games that were going to get handed to us the next day." Within six months the game had more than surpassed its goal, selling 1 million copies and eating into *EverQuest*'s subscription numbers significantly. "We didn't know if it was going to last, so Mike Morhaime would bring on one server at a time. He would say, 'We're flooded, we'll bring on one more.'"

Azeroth became home to millions of people, and as the hours of playtime racked up so did the franchise's popularity. It was featured in news stories and it was even featured in TV programmes such as *South Park*. Before long, millions were subscribing to the game each month. With years worth of planned content to cover and a frenzied fanbase, Blizzard would never need to worry about Azeroth again. The game's first expansion was *The Burning Crusade*, released in 2007, this was followed by *The Wrath Of The Lich King* in 2008. By 2010 – six years after the original game's release and many months of content patches later – Blizzard saw fit for an attempt to modernise the game, 'destroying' Azeroth with the expansion pack *Cataclysm*, reworking the original zones and adding all new areas that tied into different lore of the franchise's universe. 2012 saw the controversial release of *Mists Of Pandaria*, where the colourful *Kung Fu Panda*-esque style was criticised by the hardcore players that were still playing. Then came *Warlords Of Draenor* in 2014, which threw players into the past at an attempt at nostalgia baiting. And now, more recently, Blizzard released *Legion*, its most popular expansion pack for some time that sparked a huge spike in subscribers. At its peak *World Of Warcraft* had 12 million subscribers, yet even now it still hovers between 5 and 7 million depending on how recent an expansion pack was released. In much the same way that *Warcraft* helped to bolster the RTS genre, *WOW* gave birth to the MMO boom. Despite its age, Azeroth shows no sign of stopping and, in fact, the birth of the MMO wasn't the last innovation that the name *Warcraft* was to be used for.

In 2013 Blizzard surprised the world by announcing a completely new *Warcraft* experience: a free-to-play card game that utilised the franchise's most popular characters with simple rules but not at the expense of depth – a truly 'Blizzard' title. It was incredibly popular at launch, has grown ever since and in 2016 Blizzard announced that *Hearthstone* had 50 million users. It has since been criticised for simplifying the genre just a little too much, but as a videogame, no title has managed to popularise such a niche genre as much as *Hearthstone*. And, if anything, it's the perfect example of not only the strength and flexibility of the series but that, even after all these years, Blizzard is still determined to use the *Warcraft* name to challenge genre conventions.

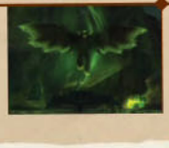
WOW returns to classic franchise lore with *Warlords Of Draenor*, which many believe was done to draw back fans lost during *Mists Of Pandaria*.

2015



After years in development, Blizzard releases its MOBA title. *Heroes Of The Storm* leverages *Warcraft*, *StarCraft* and *Diablo* characters as its Heroes.

2016



WOW's most recent expansion pack is *Legion*, bringing in the largest spike in subscribers for any expansion yet.

Star Wars

» **DEVELOPER:** Atari Inc » **YEAR:** 1983 » **COST TODAY:** £800+

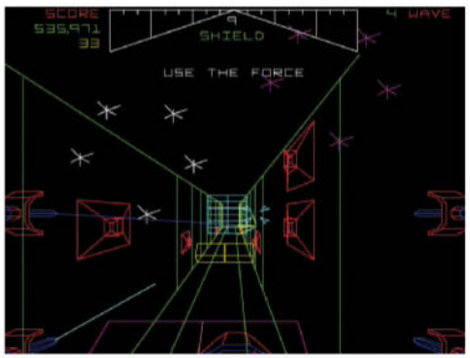
While we'd love a sit-down version of Atari's stunning coin-op, the sheer size and price mean many will never be able to justify it. Of course, even a stand-up *Star Wars* cabinet will set you back a good few pennies today, but it's understandable once you finally get to play on it. All games feel better on their original hardware and a game like *Star Wars* is no exception. One grip of that distinctive yoke and you're instantly transported back to the time you first encountered it (Porthcawl, Wales for us, if you're interested) and it's a feeling that only becomes more powerful as classic quotes from the film boom out of the machine at you.

Star Wars launched in early 1983 to critical and commercial acclaim. While plenty of *Star Wars* games had been released on various home consoles at the time, this was the first arcade game to feature the licence and Atari's developers did everything they could to ensure it featured the best technology available at the time. The end result was a classic on-rails shooter that saw you blasting down TIE fighters, fighting across the surface of the iconic Death Star and leading a desperate assault on the space station's equally iconic trench.

Star Wars fact

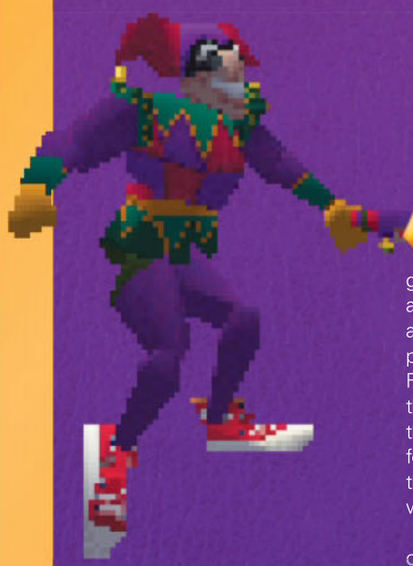
■ A conversion kit exists that allowed coin-op vendors to convert *Star Wars* into Atari's later game based on *The Empire Strikes Back*

STANDOUT MOMENT **The Trench Run**



It's fitting that one of the most exciting elements of the original 1977 movie was also the key focus of Atari's coin-op. Your first run through the trench is pretty straightforward and you only really need to deal with gun emplacements and the odd stray fireball. Later levels see the Death Star's defences really ramp up, however, and you'll be assaulted by even more firepower and will also have to frantically weave around large barriers. "Use the force, Luke," has never been more apt…

Pandem



20 years ago, most genres were feeling pressure from the oncoming 3D revolution – even the classic sidescrollers. Mitch Wallace casts spells with the wizards who added a compelling half-dimension to the traditional 2D mix

Anyone familiar with the toys-to-life space is undoubtedly aware of the ubiquitous *Skylanders* craze. In 2015, Activision announced it to be the 12th bestselling video game franchise of all time, though American developer and series creator Toys For Bob was crafting electronic adventures long before they bridged the gap between plastic figurines and lighthearted dungeon crawling. Founded in 1989, the studio's first notable efforts were the *Star Control* games, a pair of classic computer titles that retain their cult following to this day. In the years following, Toys For Bob began dreaming up something that would combine its love of *Dungeons & Dragons* with gaming's burgeoning wealth of new technology.

"We had been working with Crystal Dynamics originally on a game called *The Horde* for the 3DO and the PC," recalls lead designer and current studio president Paul Reiche III. "Then we did an expanded version of a science fiction adventure game called *Star Control 2* also for the 3DO. There was this sort of pause where the world was changing from 2D sprites to 3D, and Crystal Dynamics, in what was a pretty interesting and thoughtful move, gave us something called an SGI Crimson, which was a pretty high-end rendering 3D computer. It was used primarily for rendering movies and doing high-end graphics at the time. They just said, 'Here, take this and learn to do 3D, and we'll figure out what platform you're working on afterward.'"

» [PlayStation] *Pandemonium!* isn't all about platforming – in the Lost Caves, sliding is essential to progressing through the level.

PANDEMONIUM 101

■ An energetic, medieval 2.5D platformer that channels the best of classic sidescrollers while forging a freshly dynamic camera system for the blossoming 32-bit generation. Taking place in the magical land of Lyr, this family-friendly adventure follows apprentice wizard Nikki, insane jester Fargus, and his sidekick Sid on a quest to save their village after some frivolous spellcasting goes horribly wrong.

With 3D gameplay still in its infancy, developers throughout the industry were working hard to explore and optimise the new style of play, though not always with the best of results. Despite some valiant initial efforts, many games were filled with missteps and stumbles, and Toys For Bob was taking notice.

"When we were looking at other 3D games – I think *Alone In The Dark* was one – we noticed how slow and clumsy they were to control," Paul says. "But there were also things we liked about 3D. We were inspired by *Crash Bandicoot* and how fast and free you felt while moving, because in a way you were kind of safe, or at least it was relatively easy to focus on things that were threatening so you could just enjoy the thrill of running. So in our early experiments, we actually had players running through branching paths, and it was more like an adventure game."

Though the medieval theme was apparent from the start, the earliest version of *Pandemonium!* wasn't a platformer at all, but rather a multiplayer competitive dash toward a finish line.

"Initially, it was going to start out as a race between wizards," says lead programmer and current Toys For Bob chief technology officer Fred Ford. "Initially we

ONIUM!

» [PlayStation] Shapeshifting into the dragon allows players to not only fly, but also breathe fire.

were going to have a multiplayer race through a dungeon. We thought that we were going to have horizontal branching where you make a decision at a fork, but it turned out to be much easier and natural for the player to have the branching happen vertically through jumping. It just made more intuitive sense to the user to jump rather than make that left or right decision on the D-pad."

As development progressed, the game gradually morphed from an on-foot multiplayer racer into a sidescroller that utilised cutting-edge 3D graphics. And because of the technology at its disposable, Toys For Bob was able to take its work-in-progress to a whole new level, one that was, due to the game's active and cinematic camera, singularly unique among mid-Nineties platformers.

"It's funny how the design document is called *Wacky Wizards And The Quest For The Monkey Crown*," Paul says, "and people just loved the idea, but at some point we decided it was a whole lot more fun if it was just one player. It was too difficult trying to manage multiple characters and capturing them all on the screen – we wanted full control over the camera so we could get in close at times and have different views. It evolved from that head-to-head experience to one with a couple running through a crazy fantasy world."

IN THE KNOW

» PUBLISHER: CRYSTAL DYNAMICS

» DEVELOPER: TOYS FOR BOB

» RELEASED: 1996

» PLATFORM: PLAYSTATION

» GENRE: PLATFORMER

Toys For Bob filled that crazy fantasy world, known as the land of Lyr, with 18 colourful levels, which in turn were populated to the brim with challenging enemies like Ratbats, Walkapedes, Spiky Snails, and Goons (described in the instruction manual as "fat, web-footed cretins"). There were also larger-than-life bosses and plenty of obstacles, like boulders, geysers, and bouncy watermelons. Designer Zak Krefting, who started working at Crystal Dynamics as a tester on 3DO games like *Gex*, *Total Eclipse* and *Off-World Interceptor*, was instrumental in getting those levels up and running.

"Paul would have a rough idea," he says, explaining the basic process. "He'd want some levels to be in the clouds and some of them to be on the ground, and then we'd sit in a room and just brainstorm. We'd make a list and say, 'What's cool about a forest? Well, the spiders from *The Hobbit* were pretty cool, and so was the Ewok Village up in the treetops with those forts – maybe the forts could be on fire!' Our motto was that there were no bad ideas. No matter how crazy or irrelevant an ▶

More 2.5D Platformers

KLONOA: DOOR TO PHANTOMILE

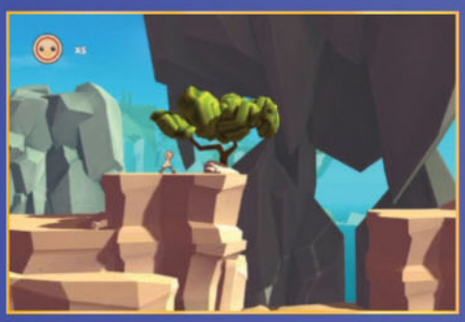
PLAYSTATION, 1997

■ Namco's foray into the 2.5D space, and an incredibly solid one at that. Klonoa, a long-eared two-dimensional creature, journeys through lively three-dimensional levels that take quite a few notes from the *Pandemonium!* playbook. Memorable music and easy-to-grasp gameplay make this a real winner.

WILD 9

PLAYSTATION, 1998

■ Developed by Shiny Entertainment and featuring a soundtrack by Tommy Tallarico, this gritty action title appeals to gamers' sinister proclivities. The creative torture and extermination of enemies via the Rig weapon is the big gimmick here. As such, slamming baddies into walls, spikes and pits is delightfully encouraged.



SHU

PS4, 2016

■ A whimsical side-scroller sporting fully-3D environments and beautifully animated 2D characters. With inspired sound design, tight controls, a charming hand-holding buddy system, and a strangely terrifying antagonist, Coatsink's recent release is a stunning, modern take on the genre.

TOMBA! 2: THE EVIL SWINE RETURN

PLAYSTATION, 1999

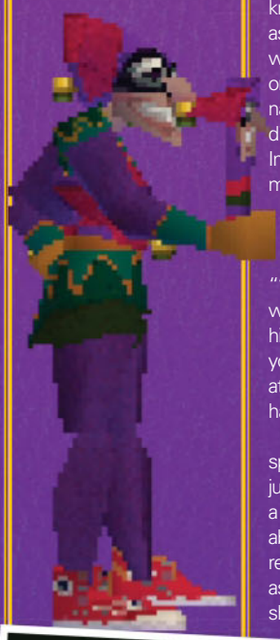
■ Pink-haired Tomba receives the sequel treatment in this follow up to Whoopee Camp's original sleeper hit. Unlike the first game, characters in this instalment are fully-polygonal 3D models, rather than sprites, though the core 2D gameplay remains largely familiar, with branching paths and plenty of objectives to complete.

DEVELOPER HIGHLIGHTS

SKYLANDERS IMAGINATORS (PICTURED)
SYSTEM: VARIOUS
YEAR: 2016

THE UNHOLY WAR
SYSTEM: PLAYSTATION
YEAR: 1997

STAR CONTROL
SYSTEM: VARIOUS
YEAR: 1990



» [PlayStation] The Gwynn statue Easter Egg at the beginning of the game, hiding in plain sight.

▶ idea was, we'd still throw it up there, and at the end of it, we'd pick the top handful of ideas that really stuck. We'd circle those and erase everything else."

As far as playable heroes went, there were numerous holdovers from the early racing prototype, including a knight and even a hammer-wielding strongman. But as Paul elaborates, this initial cast would eventually be whittled down into just two main protagonists, three if one is counting a certain wand. "We had this old wizard named Gwynn – I think he was the first drawing we did – and he was sort of like Merlin with track shoes." Interestingly, a proper homage to Gwynn actually managed to make it into the final game. Just as the first level begins, a Gwynn wizard statue can be knocked over to earn a free power-up.

"So then we started thinking," Paul continues, "'if we're going to have all these other wacky wizards, what's the exact opposite? Let's think of his sidekick, his apprentice. He's an old man, so what if he had this young girl – not like a buxom woman – but this sort of athletic teenager?' I had a daughter and didn't want to have a sexpot at the centre of a kid-inclusive game."

And so wizard apprentice Nikki was born, whose special ability would come to be a useful double jump. But her companion, who'd be outfitted with a somewhat less useful cartwheel attack, came about more as a result of the panicked need for a replacement. "I had a crisis of faith about people playing as an old man," Paul laughs. "It was one of those shower moments where I freaked out and thought

» [PlayStation] Bosses are large and serve to break up the traditional platforming action.

» [PlayStation] Fargus and Nikki can sometimes pick up orbs that grant them special spell powers, like this fire projectile.

"I had a crisis of faith about people playing as an old man"

Paul Reiche III

'Oh my god, we have to do something else!' So Steve Kongsle [lead artist] had a bunch of drawings he'd done, and one of them was a jester. He happened to have this wand that was a puppet, and as we were writing the script for the intro and interstitial videos, we needed another character to speak. So that ended up being Sid, which was basically a little Fargus that could show off how nutty he was because he was talking to himself."

Throughout the quest, Nikki and Fargus could pass through special gates that transformed them into animal forms. Though they're relatively short, the shape-changing sections are fun and break up the action nicely. "We liked the idea of arbitrarily giving the player another body form and mechanic type," Paul says.

"In the beginning, there was a lot more emphasis on [Nikki and Fargus'] ability to change into different creatures," Zak adds, "which turned out to be fairly problematic! We tried to put it in everywhere and it just made everything a big mess, so we decided to restrict the abilities to really focused areas."

As all the elements came together, the team began to feel as if they'd stumbled onto something significant. "We relaxed when we were playing *Pandemonium!* in ways that we hadn't when playing a lot of other 3D games," says Paul. "We were always freaking out about which way we were looking in those early titles, so we really thought we'd hit on something,"

As such, it's little surprise that Toys For Bob had big plans for *Pandemonium!*, plans that included Nikki and Fargus becoming PlayStation mascots. "We had talked to Sony about making *Pandemonium!* a PlayStation-exclusive," Zak reveals. "They were pushing 3D, and it was between us and *Crash Bandicoot* for their flagship mascot game. Sony ended up picking *Crash* and Crystal Dynamics ultimately decided to release *Pandemonium!* on multiple platforms. Had things gone differently, it could have been a whole different reality."

Though Paul admits that Sony made the better choice in *Crash Bandicoot*, one can't help but imagine an alternate history in which, rather than everyone's favourite marsupial, a magician-in-training and a court fool starred in Sony advertising. In a cosmic turn of events, *Crash Bandicoot* is making a return to the gaming world via the Toys For Bob-developed *Skylanders Imaginators*.

Pandemonium! released on the PlayStation in late 1996. The game was given an odd makeover by Bandai for Japan, as well as a new name in *Magical Hoppers*. It also featured some changes for Nikki in particular, which Paul jokingly refers to as the "cocktail waitress" look. A PC version would follow in 1997, as well as a less-than-stellar Saturn port. The game would even eventually even make its way to the ill-fated Nokia N-Gage.

But after all these years, how does Toys For Bob look back at its game? "It was colourful, and there were a lot of surprises that would show up," Paul says. "It was more narrative than a lot of the games that were out at that time, even some of the ones we've made. It was kind of scary and kind of silly, and a few of the monsters were terrifying." He pauses before finishing his thought. "I felt like we were telling a story about an adventure, an adventure that I would want to be on." ✱

Big thanks to Paul Reiche III, Fred Ford, and Zak Krefting for sharing their stories!

The Voice of Madness

Like any self-respecting early PlayStation game, *Pandemonium!* opened and ended with story-driving FMV sequences. Interestingly enough, Fargus and accompanying stick puppet Sid were voiced by none other than improv comedy extraordinaire, Greg Proops.

"We were looking for a snarky comedian, someone with a lot of character in their voice," Paul explains. "Crystal Dynamics had gotten the head of Fox Entertainment to be their president or chief executive officer. He sort of demanded that we use real talent, which was a good call, and he certainly had access to it. Our producer Mark Wallace was a huge *Who's Line Is It Anyway?* fan, and somehow through that we tracked [Greg] down."

As it turns out, the cinematics weren't the only parts of the game that originally utilised voice acting. "Initially there were close to a hundred lines that Fargus spoke as he ran through the game," Paul says. "We had them in there, and then at one point we freaked out because of how frequently they played. They frequency made everybody unhappy, and we were close to the end, so we ended up pulling those out. But there were a lot of really good one-liners. We just wrote a million dumb lines and Greg ad-libbed a bunch. One was, "This looks like a great place for my purple chaps!"

And as Fred adds, Greg Proops continues to be involved with Toys for Bob. "In a twist, he's actually a voice in *Skylanders Imaginators*!"

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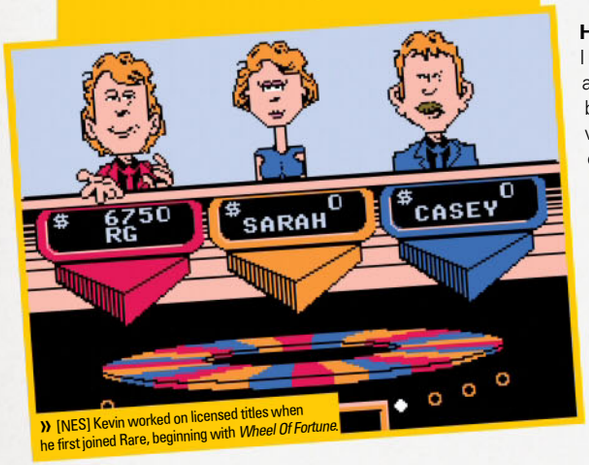
> I enjoyed creating the graphics so much and it was always fun. Long hours – but fun
>
> Kevin Bayliss

KEVIN BAYLISS

After spending 18 years working on some of Rare's most iconic titles Kevin Bayliss later contributed to the rebooted Killer Instinct before joining Playtonic Games. Rory Milne takes Kevin from Space Invaders to Yooka-Laylee

Kevin got his big break in 1987 when he was hired by Rare. The artist was trained by Tim Stamper and put to work drafting sprites for NES titles. Character design was later added to Kevin's CV, with his most memorable creations being the Battletoads, the reimagined Donkey Kong and the *Killer Instinct* fighters. Kevin's promotion to head of graphics saw him oversee the visuals for the company's entire output, and as lead artist on *Star Fox Adventures* he worked with Shigeru Miyamoto. Following his exit from Rare, and a ten-year break from the industry, Kevin produced concept art for *Killer Instinct: Season Two* before finding his spiritual home at Playtonic Games creating art for the upcoming *Yooka-Laylee*.



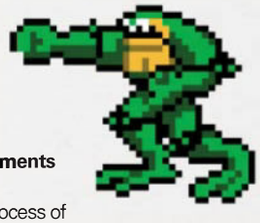
» [NES] Kevin worked on licensed titles when he first joined Rare, beginning with *Wheel Of Fortune*.

What were your earliest experiences of playing videogames?

I remember when I was about ten years old, my parents took my brother and I to our new local superstore. We were left with 20p each to play on a brand-new *Space Invaders* machine that was in the foyer. As time passed, it was replaced with *Asteroids*, *Galaxian* and followed by other classics. It wasn't long before we were both asking for our own handheld arcade games like *Scramble* and *Munchman* for Christmas, and I built up my own small collection. Eventually, we upgraded to owning our first 'games console', called Prinztronic 10 In 1, which had ten different varieties of *Pong* on it. It was pretty rubbish, but was replaced with an Atari 2600, which just looked amazing in comparison. Soon, home computers were becoming very popular, so I saved up pocket money and used the, 'It'll help me with school,' excuse on my parents to buy one. I managed to get a second-hand 16K ZX81, and I *loved* it, despite it having no sound, no colour and terrible graphics. However, my beloved '81 was also upgraded, and over time, my brother owned an Acorn Electron, ZX Spectrum and Commodore 64.

How did you get your start at Rare?

I knew that I wanted to work in the [games] industry and tried to find a way in, but it wasn't easy back then because it wasn't taken seriously by many! My parents wanted me to get a 'proper job' – whatever that is! My careers officer told me that I was 'dreaming' and sent me to a textile company. Luckily, I managed to escape after my interview and began a college course while drawing pictures on my C64 to send to software companies. After receiving a call from Tim [Stamper], I was dropped off at Manor Farmhouse by my parents. I couldn't believe it when he showed me the original *Underwurlde* artwork from a rack of covers from the Ultimate titles. After a coffee, and being introduced to Chris [Stamper] and Mark [Betteridge], he showed me how they worked and what they were doing with the NES. I was sold immediately.

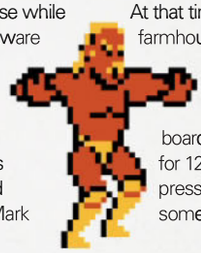


What were your first assignments for Rare like?

Tim walked me through the process of pixelating artwork on paper and how to produce graphics for the NES. Pictures would be hand-drawn then traced into a grid using felt-tip pens and tracing paper. If it was a moving character the artwork would then have to be divided into as few 8x8 pixel squares – sprites – as possible. Then I was shown how to work out the hexadecimal code to correspond with those squares and the codes for their positioning. I'd enter all the data then save it all onto a floppy disc before continuing with the next frame of animation and so on. This I'd then hand over to the software engineer to put into the game. Initially, I was often working alongside Mark Betteridge or Chris Stamper, but as more engineers arrived I'd spend my time working on more than one game at once. I enjoyed creating the graphics so much and it was always fun. Long hours – but fun!

What are your memories of working with Tim?

When first joining Rare, the graphics department was just Tim and myself, and I shared an office with him each day. Once he'd shown me the ropes, we'd bounce ideas off each other while working away to Radio 1.



At that time, we were operating in a Georgian manor farmhouse surrounded by chickens, ducks, geese and Rare's 'security force' – Poppy, Daisy, Treacle and Rosie the German Shepherds. In our graphics studio, we had two huge drawing boards each filled with fluorescent strips glaring for 12 hours each day. My face was pretty much pressed against the glass and I could feel it burning sometimes so I took sunglasses to work in,

SELECTED TIMELINE

GAMES

- **WHEEL OF FORTUNE** (NES) 1988
- **COBRA TRIANGLE** (NES) 1989
- **WHO FRAMED ROGER RABBIT** (NES) 1989
- **HOLLYWOOD SQUARES** (NES) 1989
- **CALIFORNIA GAMES** (NES) 1989
- **JOHN ELWAY'S QUARTERBACK** (NES) 1989
- **WWF WRESTLEMANIA** (NES) 1989
- **WWF WRESTLEMAINA CHALLENGE** (NES) 1990
- **TIME LORD** (NES) 1990
- **A NIGHTMARE ON ELM STREET** (NES) 1990
- **SUPER OFF ROAD** (NES) 1990
- **PIN BOT** (NES) 1990
- **DOUBLE DARE** (NES) 1990
- **HIGH SPEED** (NES) 1991
- **BEETLEJUICE** (NES) 1991
- **BATTLETOADS** (NES) 1991
- **WWF SUPERSTARS** (Game Boy) 1991
- **BEETLEJUICE** (Game Boy) 1992
- **BATTLETOADS** (Coin-op) 1992
- **BATTLETOADS IN BATTLEMANIACS** (SNES) 1993
- **BATTLETOADS IN RAGNAROK'S WORLD** (Game Boy) 1993
- **BATTLETOADS & DOUBLE DRAGON** (NES, SNES, Mega Drive, Game Boy) 1993
- **DONKEY KONG COUNTRY** (SNES) 1994
- **KILLER INSTINCT** (Coin-op) 1994
- **MONSTERMAX** (Game Boy) 1994
- **KILLER INSTINCT** (SNES, Game Boy) 1995
- **KILLER INSTINCT 2** (Coin-op) 1996
- **KILLER INSTINCT GOLD** (N64) 1996
- **DIDDY KONG RACING** (N64) 1997
- **BANJO-KAZOOIE** (N64) 1998
- **DONKEY KONG 64** (N64) 1999
- **PERFECT DARK** (N64) 2000
- **STARFOX ADVENTURES** (Gamecube) 2002
- **PERFECT DARK ZERO** (Xbox 360) 2005
- **KILLER INSTINCT: SEASON 2** (Xbox One, PC) 2014
- **YOOKA-LAYLEE** (Various) 2017

> "Creating a coin-op game is very different to creating a home console game"
> Kevin Bayliss

because no matter what the weather was doing outside it was like a tanning salon in the office!

Did the licensed games you first worked on at Rare cramp your style at all?
Sometimes working on licences was great, but most of the time it was a pain in the arse. Having to adhere to a story from a film often restricted the game design and also the graphics. Also, you had to please non-gaming people 'at the top' or famous personalities who were depicted in the game. Original products allowed you to be way more creative, [and] meant you never had to worry about a fax telling you, 'Beetlejuice looked too much like Michael Keaton', 'Hulk Hogan looked 'bald' or that Andre The Giant looked too 'overweight.'

How did you approach the challenging NES original *Cobra Triangle*?
It was the first time I'd ever created anything *major* for a game so I was looking forward to getting stuck in, and was given the task of creating some of the boss characters. The Sea Serpent and Squid are the ones I was responsible for, as they both had a similar setup. I also produced the title screen after we'd changed the title of the game from *Jetboat – Escape From The Bermuda Triangle*. Apart from those, and the little people you had to rescue, that was about all I produced for the game as Tim had already developed most of the other graphics not long after I'd been employed.

What was the background to you working with the WWF franchise?
Joel Hochberg from Rare Coin-it – our Miami-based associates – was visiting, and I remember he brought over a stack of Wrestlemania tapes from the US. After a entertaining evening watching through them, he said that we may be producing a WWF game for the NES, so I jumped at the chance to work on it.

» Rare Coin-it's Joel Hochberg and a teenage Kevin Bayliss in sunny Miami in 1988.

As the first game I'd really been let loose on I don't think it turned out too badly – although there's little 'grappling' and it's more of a punching and kicking experience. But it is an important one for me, because it was the first game to get me into the way of working and communicating with companies in the US.

How different a process was creating the *Battletoads* characters to drafting sprites?
It was the first time I'd ever put together an 'art manual' rather than making up graphics that I needed for a game as I went along. Rare wanted to provide something to companies who'd be producing *Battletoads* products like the toys, electronic game and cartoon. We were so busy with other projects that we just wanted to hand a visual guide over to those companies and let them get on with it so we could continue to focus on our software.

How did creating the *Battletoads* coin-op compare to console design?
Creating a coin-op game is very different to a home console game. You need to keep players interested and keep putting money in, or else the owner of the machine isn't going to get it paid for very quickly. The

» [SNES] *Battletoads* spawned numerous sequels across a variety of systems.

FIVE TO PLAY Just a few of Kevin's standout games

COBRA TRIANGLE 1989

■ Although episodic, the stages in Rare's unforgiving speedboat title form a cohesive whole. So power-ups gained in a race prove beneficial in a boss fight, and 1-ups accrued in a bonus level prove crucial to completing an obstacle course. Aesthetically, the game's isometric visuals serve form and function equally well.

BATTLETOADS 1991

■ Rare's tribute to *Double Dragon* adds humour and brick-hard, non-brawling interludes to the cathartic hyper-violence popularised by its arcade inspiration. Despite severe challenges, such as riding a hyperactive snake and jet-skiing through molten lava, *Battletoads* perfectly gauged combat ensures its NES classic status.

DONKEY KONG COUNTRY 1994

■ A revolution on its release thanks to its prerendered graphics, *Donkey Kong*'s 16-bit debut still looks good for its age and it still provides an absorbing solo adventure or riotous co-op experience. *DKC*'s inventive opponents and interactive environments enhance its polished, well-worked level designs.

KILLER INSTINCT 1994

■ While the same technology and techniques were employed to produce *Killer Instinct*'s visuals as had been used to develop *DKC*'s graphics, *KI* was designed for state-of-the-art coin-op hardware rather than a 16-bit console. The end results wowed arcade goers, but the game is best remembered for its special move combos.

DIDDY KONG RACING 1997

■ Unique for blending racing with a narrative adventure, *Diddy Kong Racing* is as much a storied collect-a-thon as it is a series of sprints to the finish line. *DKR* ensures replay value by providing novel power-ups, manic boss races and engaging cutscenes that move Diddy's story forward.

general curve of difficulty becomes sharper as the game progresses. It's all about creating a balance, and making the player feel as though they are just about to progress to the next level, and encourage them to put in another coin rather than give up. So myself, Chris Sutherland and Gregg Mayles all had to adopt a different way of thinking to create the levels and moves for the *BT* coin-op.

How did you feel about squeezing NES games like *Battletoads* into the Game Boy?

To be honest, I was a little concerned about it having such a limited palette. Tim tried reassuring me that producing black-and-white graphics was really easy in comparison to the NES, but I wasn't convinced. However, it *was* easier to work with, and its LCD display meant you didn't have to worry about colours or messy sprite overlays. The only thing you had to bear in mind was that the display wasn't as clear as a NES and so you'd often need to simplify the background graphics in order to get the sprites in the foreground to stand out.

What do you remember about Chris Stamper's fabled RAZZ arcade board?

I remember creating graphics for an isometric-based brawling game with three characters in each team pitched against two other teams using three arcade cabinets – all back-to-back. I think we called it *Knuckle Dusters* – or something similar. As Tim and Chris were such experts with isometric games, I thought we were on to a real winner and couldn't wait to see this fusion of *The Last Ninja* and *Double Dragon* appear in the arcades! However, because it was just going to take too long to produce, and [as] I was splitting my time between that and NES graphics, the game never came to be. I also began drawing graphics for a one-on-one *SFII*-style game using the *Battletoads* for the RAZZ hardware, but this also got shelved due to time limitations.

Why did you think you contributed so much to the *Battletoads* series?

I suppose the 'toads were *kind of* my characters so I wanted to make sure they looked and animated right. Tim knew that, and after the first game was created he was confident enough to let me loose on other *BT* projects. Design was always overseen at some point, but I was given freedom with *Battletoads* graphics. This was at a point in time when Rare was expanding and so I was given more responsibility with the graphics department and was then made head of graphics, which made me really proud to work there.

What extra challenges did you have in the role of Rare's head of graphics?

My role was much the same as I was dealing with the same kind of things before being promoted. In fact, I remember not wanting the promotion to interfere too much with my creative role at the company, so after some discussions with Tim and Chris we jokingly decided to give me the director's role but with 'absolutely no responsibility whatsoever' so I could continue working on the teams directly and creating graphics. I interviewed, trained employees and took part in important meetings in addition to overseeing games in our review meetings, but was allowed to still focus on whichever game I was involved with at the time. I just had a valid excuse when I wanted to bail out of a meeting that became too boring. Lucky me!

» Kevin would've looked forward to seeing his games featured in *Nintendo Official Magazine*.

How did you find moving from 2D graphics to 3D prerendered sprites?

We had no training with the 3D software itself, and to begin with, Tim and I just sat in our own rooms with a Silicon Graphics machine and experimented. Often we'd be sharing a manual so you can imagine some of the language that echoed through the farmhouse when we'd made silly mistakes. But after much perseverance we produced some great-looking demos and once we were happy that we could make things work, we set about trying to scale the graphics down to a tiny palette of 15 colours and a tiny resolution. Using prerendered sprites was a real bonus because if our 3D rendering

» Kev muses that he'd like to see his characters in a mash-up game, similar to *Smash Bros.*

MEETING MIYAMOTO

Kevin on his adventure to Japan

"I loved that trip, but to begin with I must admit I was a little homesick and slightly concerned about the language barrier. But immediately upon arriving there with Lee Schuneman and Phil Tossell, we were made to feel extremely welcome. The next morning, we went to the Kyoto office to discuss ideas for the story that would explain Fox McCloud embarking on his next adventure. We were taken to the Fushimi Inari Shrine for a little sightseeing and learned some Japanese myths about animals. Foxes in Japan are seen as heroic animals, and any seen around the temple are viewed as guardians. This was a real eye-opener into Japanese culture [and] showed us why certain animals are chosen as specific characters in Japanese videogames. We spent the whole week in the meeting room, with drawings all over the place, and I swapped ideas with the creator of the *Star Fox* characters – Takaya Imamura. We all came up with the story behind the game, and Shigeru Miyamoto very politely gave his input, before eventually reaching a design plan."

» Kevin is particularly proud of the *Battletoads* franchise, being the driving force behind the characters' design.

didn't work correctly and produced a corrupted frame of animation we 'bodged' it to look right in the 3D software and then continued rendering – or fixed it with Photoshop sometimes. This method was very forgiving and made our step into the 3D world a little easier.

How challenging was it to redesign *Donkey Kong*?
It was straightforward, surprisingly! I got the word from Tim that we were going to be resurrecting *Donkey Kong* for our 3D project, and, after receiving some black-and-white drawings from Nintendo showing the classic DK character, I got started. I wanted to make a heavy but compact-looking character and some of the first sketches were very chunky. There were a few concepts that a guy at Rare – James Ryman, a fantastic artist – produced, but Tim wanted to use the design I had sketched up as a starting point because DK's proportion suited the platform game that we were going to create.

How did the inventive designs for *Donkey Kong Country*'s other characters come about?
Being located near to the famous Twycross Zoo meant that we had a collection of wild animals to explore just a few miles up the road. So we'd take our cameras and study the specimens they had there, which helped us come up with ideas. None of the crocodiles had crowns or body armour, but we just tried to make them look funny and memorable! Steve Mayles, Mark Stevenson, Ed Bryan [and I] all had wacky imaginations when it came to coming up with typical 'Rare' characters, and we still do – as you'll see in *Yooka-Laylee*. Luckily we are still located close to the zoo, and so if we need to study behaviour, we can take a 'working trip' to watch animals with an ice cream!

Which aspects of designing the *Killer Instinct* coin-op did you most enjoy?
It was my first fully-rendered game, and I had complete control over creating the characters and how they moved. The fact that we were pioneers using mocap and prerendered 3D models for a heavily 'combo-based' fighter made the development process feel unique and new to us. From designing and building the characters to performing their motion capture and voicing some of them it was very entertaining to work on, and I'm so proud of it as a brand. I'd love to work on a fighter again, and fortunately I'm working in the industry with like-minded people – so maybe we'll create Playtonical *Smash Bros.* at some point!

How did you find going from *Killer Instinct* coin-ops to *Diddy Kong Racing* for the N64?
I was excited to begin working on another genre that I love, and there was a new kid in town – the N64. This changed everything, and after seeing *Mario 64* I just wanted to create something that really felt as though you were immersed in a little world inside the console. 3D was new, and after working on a violent game, it was nice to focus on something that was cheerful, rather than something with a menacing undertone. It was very refreshing, and a welcome change for me.

What was the background to all the changes made to *Star Fox Adventures*?
The game started off with a tiger character running around and I'm sure we had a small dinosaur running around with him. After looking at *Ocarina Of Time* we wanted to create a huge 3D adventure that would [have] him travelling through a world filled with prehistoric monsters. However, soon we changed it into a Wolf, it caught Nintendo's eye. It was suggested that rather than try to build a new universe, we should create a new *Star Fox* adventure. The game was looking fabulous, even on N64, but with the system coming to the end of its time, the decision was made by Nintendo for it to be released on the new GameCube system, which was sensible.

» Kevin's impressive Rare collection includes a *Donkey Kong Country* demo cart, complete with felt-tip typography.

What did your final role at Rare as Lead Character Artist on *Perfect Dark Zero* entail?
As the company had a reputation for creating cartoon-style graphics rather than ultra realism, I was asked to oversee the game and try to incorporate Rare's traditional visuals and give it a colourful look. I was never a huge fan of first-person shooters, but did my best to get as much character and personality into the game as possible. At around this time, I was also beginning to feel that I would like to make a change and take a break from videogames as I'd been working in the same environment for over 18 years. With Microsoft acquiring the company and many changes being put into place, it seemed like the perfect time to make changes of my own, and so managed the project until the majority of the graphics were complete. I left the company with a little sadness, but a lot of appreciation for my opportunity and time there.

What motivated your return to games as an art consultant for *Killer Instinct: Season Two*?
I spotted the buzz about *KI* on the internet and contacted Ken Lobb to congratulate him and we talked about me perhaps providing some ideas and concepts for some of the new characters. By then I was producing concept artwork for another videogame as a way of slowly getting back into videogames and so I split my time between both projects.

How did you get involved with Playtonic Games?
Gavin [Price] approached me at around the time I was producing concept art for *KI* because he was looking to 'put the band back together.' I'd have loved to have joined them at the very beginning but needed first to re-educate myself with software. After visiting Rare to record an interview for its *Rare Replay* videos, I stopped by to see the boys before travelling back 'Oop North'. After being reunited with them and their sense of humour after such a long time, I knew that this was what I should be doing again and so began producing concept art for *Yooka-Laylee*, which has been a fantastic experience.

Would the idea of working on Rare IP at Playtonic appeal to you?
[Everyone] at Playtonic worked closely together at Rare for a long time, and together we have all the ingredients we need to create a fabulous universe of characters. Right now, the focus is on developing our own franchises, but in this industry anything can happen. We already have a appearance from Shovel Knight in *Yooka-Laylee*, and I'm sure there will be more of this kind of thing in the future. We are all fans of all of those characters we created years ago and have a great fondness for all of them, so of course we can all now imagine them in games that were never created when we were working together back in the day. A vegetarian cooking game with Fulgore? *Riptor's Brass Rubbing Simulator*? Or how about *Banjo's Bobsleigh Blood Blaster*? Ah, we'll see what happens.

Are you as passionate about games now as you were as a teenage developer?
All videogames look fantastic nowadays. But for me, there was something special about the crudeness of their appearance long ago because you used your imagination to fill in the details. Things have progressed so much that some of that magic isn't quite the same when I play a game now, but has been replaced with a new kind of magic that comes from the power that we have with our new technology. I just hope that in 20 years time while we are playing *even more* fantastic-looking games we will have fond memories of the *retro* games of the future that we are creating right now.

Many thanks to Kevin for making this feature possible. Kevin is online at @kb_playtonic.

RASH VS KI: SEASON 3

Kevin on the Battletoad's return

"I wasn't involved with his resurrection due to my joining Playtonic Games. I was amazed and surprised by his appearance in *Killer Instinct*, and at the same time quite flattered that another of my characters had made it into a videogame 20 years after I had originally created him. He looks superb, although I guess he hasn't really been redesigned. *Enhanced* would be a better word, I guess. He now looks exactly as I'd imagined him to if he'd appeared in a big-budget film all of those years ago. He's spot on, and I'm very happy to see him alive and kicking once again!"

» [N64] While Kevin wasn't on the *Banjo-Kazooie* development team, he did provide some early concept art.

» [PC] *Yooka-Laylee* is due out next year and is already looking like it will be a fantastic spiritual follow-up to *Banjo-Kazooie*.

Nintendo Classic Mini: NES

HAS NINTENDO CREATED MINIATURE PERFECTION?

INFORMATION

- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **PUBLISHER:** NINTENDO
- **DEVELOPER:** IN-HOUSE
- **PLAYERS:** 1-2

Ever since the Nintendo Classic Mini: NES (or NES Mini) was announced, websites and magazines (including ourselves) have been making quite a big deal about it. Well Nintendo's new miniature marvel is finally with us and the device is every bit as good as we were hoping it would be.

Let get the bad news out of the way first, though. The NES Mini will not play your old NES cartridges, nor will it link up to your Nintendo account to allow you to download NES games you may have already purchased. It also doesn't come with an SD Card slot, so you're not going to be able to simply download a load of games off the internet and load them onto the device for free. Oh, and despite us only using it for a couple of days, one of the Start buttons is already sticking slightly if you press the right side of it.

» [NES Mini] The amount of publishers involved with Nintendo's device really is impressive.

» [NES] You can have up to four save slots, handy if several of you want to play the same games.

You can't lift the flap on the front of the console either, which makes us rather sad. The length of the leads for both the pads and those that connect to the device are a little on the short side, too, meaning care needs to be taken with regards to the positioning of your new toy. While that seems like a rather large list, the positives of the NES Mini far outweigh its few minus points.

From the moment you see the authentic-looking packaging, it's obvious that Nintendo has put an incredible amount of effort into hitting every gamers' nostalgia gland. It's styled on the original box that was used to launch the NES 30 years ago and it looks as eye-catching now as it did then. The device itself is incredibly light and looks absolutely fantastic, effortlessly capturing the distinctive design of the original 30-year-old console. The pads, on the

BRIEF HISTORY

» While it's known in the west as the NES, Nintendo's first console actually started off as the Famicom in Japan, where it was released in 1983. It was rebranded as the NES and given a brand-new look for North America in 1985, with Europe receiving the same version in 1986. It sold nearly 62 million units worldwide.

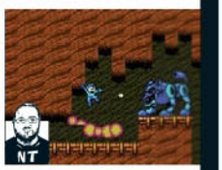
» There's so much good stuff this month we've had to extend our coverage. Darran's been getting to grips with the NES Mini, while Nick's spent the last few weeks deep in Civilization VI

✱ PICKS OF THE MONTH

DARRAN

Bubble Bobble

The flickering can get quite bad on some stages, but it's been amazing fun playing this in the office with a second player. I love the theme tune, too.



NICK

Mega Man 2

No I've not been playing it, but watching Darran swear his way through each stage has been endlessly entertaining.

JUST A SCORE
GIVE YOUR SCORES · FOLLOW OUR SCORES
Download on the App Store

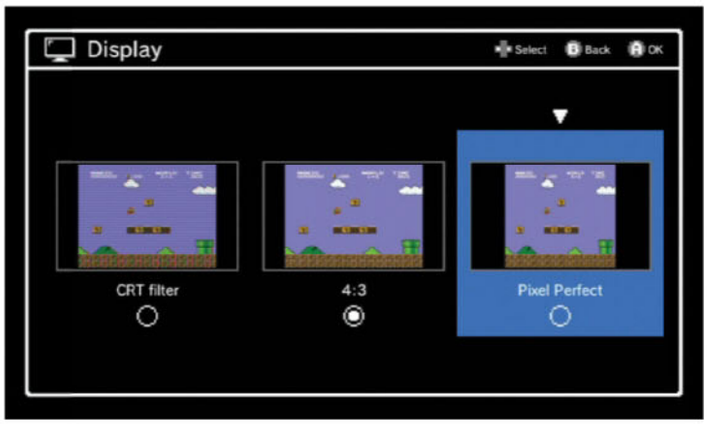
» [NES Mini] Personally we prefer sharp scanlines, but some will prefer this fuzzier, authentic take.

other hand, are virtually identical to the original NES ones and make a lovely 'clicky' sound when you press them. Yes, it's still not very comfortable to hold for extended periods (just like the originals, in fact) but you can get around this by using a Wii Classic Controller.

There are three distinct display settings, delivering a 4:3 setting, a super-sharp 'Pixel Perfect' alternative, as well as a suitably fuzzy CRT offering, all of which can be activated at any time by simply pressing the reset switch. The device itself is powered by USB, and it comes with a suitable power lead as well as a HDMI cable. Annoyingly, selecting the Manual options directs you to Nintendo's online website, which is a little bit of a drag. The options are otherwise slight, being fairly basic offerings like being able to turn off the cute demo that plays when the device isn't being used.

The games themselves can be navigated through a variety of ways, including Title, Two Player, Recently Played, Times Played, Release Date and Publisher. The emulation itself is excellent and while it would have been nice to have an option to turn off the flicker (which varies in intensity depending on the game) it's never a deal breaker. The list of included games has been well covered since the machine's release, and it's, quite frankly, excellent. There are some odd choices on offer, sure, but the sheer diversity of included titles is impressive. Every type of genre seems to be catered for, from platformers and RPGS, to sports games and arcade conversions, while the range of different publishers, including Konami, Capcom and Square Enix that Nintendo has assembled should also be commended.

Playing games couldn't be easier. Simply select the one you want and away you go. Games can be paused in the conventional way, or you can simply press the Reset button on the front of the system to access options, like changing the screen display. Pressing the Reset button also brings up a save option that can be stored in memory by simply pressing Down on the D-pad. Up to four different saves can be stored for each game, and a handy set of circles show which game has save files in place as you scroll through them the available list of titles. It's an incredibly useful feature,



» [NES Mini] There are three different screen offerings: CRT, 4:3 and Pixel Perfect.

» [NES Mini] The ability to play games at 60Hz makes a tremendous difference to how they play.

particularly for the likes of *Final Fantasy*, *StarTropics*, *Metroid* and *The Legend Of Zelda*.

30 games represents amazing value for money and while it's disappointing that there's no way to add additional titles, it's hardly surprising when you consider Nintendo's stance on both piracy and how it approaches digital. Considering it would cost over £350 to buy cartridge versions of the featured games, or over £100 for their Virtual Console equivalents, Nintendo's new system feels like it's well worth the cash.

While it's a real shame that there's no ability to download Virtual Console games onto the device, the NES Mini otherwise does exactly what it's supposed to do: deliver a nostalgic hit of truly great games at a very reasonable price point. Here's hoping that the device does well enough that Nintendo to considers creating a Nintendo Classic Mini: SNES follow-up in the future. ✱

In a nutshell

Sturdily made, and with a host of fantastic games, the NES Mini is everything we want from a plug-and-play device. Some will bemoan the lack of SD Card support, but there's no denying that Nintendo's new system represents amazing value for money.

✱ MINI CONSOLE, MASSIVE GAMES

Balloon Fight ★★★☆☆
Bubble Bobble ★★★★☆
Castlevania ★★★★☆
Castlevania II: Simon's Quest ★★☆☆☆
Donkey Kong ★★★★☆
Donkey Kong Jr. ★★★☆☆
Double Dragon II: The Revenge ★★★☆☆
Dr. Mario ★★★☆☆
Excitebike ★★★★☆
Final Fantasy ★★★☆☆
Galaga ★★★☆☆
Ghosts 'N Goblins ★★★☆☆
Gradius ★★★★☆
Ice Climber ★★★☆☆
Kid Icarus ★★★☆☆
Kirby's Adventure ★★★★★
Mario Bros. ★★★☆☆
Mega Man 2 ★★★★☆
Metroid ★★★★★
Ninja Gaiden ★★★☆☆
Pac-Man ★★★☆☆
Punch-Out!! Featuring Mr. Dream ★★★★★
StarTropics ★★★★☆
Super C ★★★★☆
Super Mario Bros. ★★★★★
Super Mario Bros. 2 ★★★★☆
Super Mario Bros. 3 ★★★★★
Tecmo Bowl ★★★☆☆
The Legend Of Zelda ★★★★☆
Zelda II: The Adventure of Link ★★☆☆☆

Sid Meier's Civilization VI

AUT CAESAR AUT NIHIL

BRIEF HISTORY

» Sid Meier's *Civilization* series made its debut back in 1991 on the IBM PC, and soon found its way to a variety of other platforms based on its success. While the mechanics have changed, the goal of developing a successful empire has remained the same throughout the series' 25-year history.

INFORMATION

- **FEATURED SYSTEM:** PC
- **ALSO AVAILABLE ON:** MAC
- **RELEASED:** OUT NOW
- **PRICE:** £49.99
- **PUBLISHER:** 2K GAMES
- **DEVELOPER:** FIRAXIS
- **PLAYERS:** 1-12 (ONLINE)

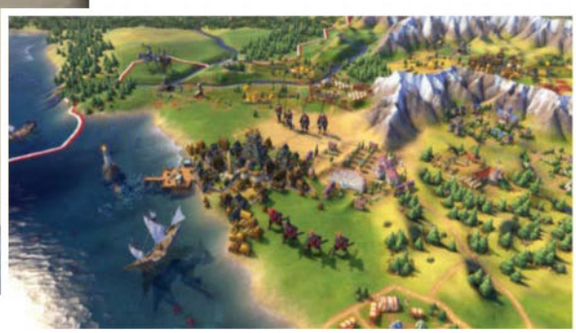
If you've ever wondered how much better off the country would be if you were in charge, you've likely come across Sid Meier's *Civilization* series before – and judging by your list of the top 150 games of all time, quite a few of you are aspiring emperors, with three of the previous five entries having made it in. But the good news is that even if you haven't any experience with 4X games, *Civilization VI* will accommodate you well.

The goal is the same as ever – build an empire over the course of thousands of years, by exploring the world, expanding your territory, exploiting resources and exterminating your enemies. You'll start off with primitive warriors and technology and develop through to the modern era and beyond, and attempt to win using religious supremacy, military conquest, scientific advancement or cultural achievements.

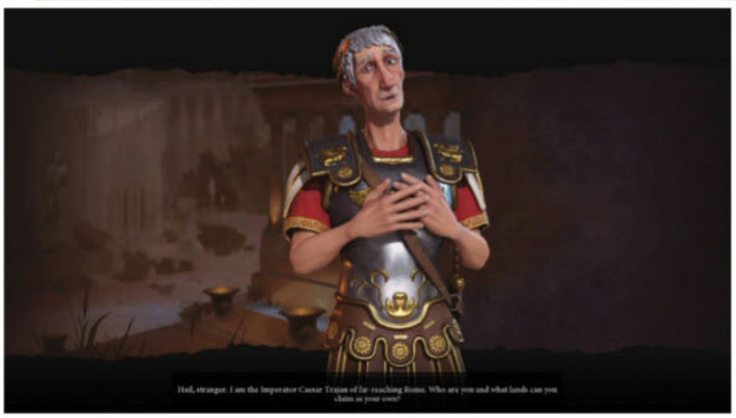
New players are given the option of a tutorial, but even if you skip this there's plenty of optional help. The game can provide recommendations on your building choices as well as your progress through the various research paths, and you'll be given a good picture of your progress as compared to other players. There are many complex systems at play here, but you'll never be left in the dark – you're notified of any problems such as approaching barbarians or an unhappy population, and it's easy to find out what to do to rectify them. What isn't so well-explained is how your early decisions are crucial to the late game, but this is something you'll pick up over time.

For existing *Civilization* players, it's not a revolutionary change. Arguably the most noticeable tweak will be the introduction of a new Civics tree, which

» [PC] The new Policies menu is slightly drab, but it's a key new part of the game.



[PC] Military scuffles are played out through quick animated sequences.



brings cultural improvements out of the technology tree and into their own ecosystem. The goal here is to make it easier to achieve a cultural victory – but cultural victories themselves are a bit of an oddity, being based on tourism (the goal is to ensure your international tourism is ahead of every other player's domestic tourism).

Another noticeable change concerns combat. Rather than the one unit per tile restriction of *Civilization V*, you can now consolidate units of the same type into a single, larger unit. This cuts down on the space needed to hold an army and streamlines combat, with fewer moves to make power turn for both human players and the CPU. Elsewhere, there's the new Policies system, which allows you to pick bonuses – for example, the Colonization Policy gives you a boost to the production of Settlers, while Conscription lowers the maintenance cost of your troops. Policies can be classified as Military, Economic or Diplomatic, and you can implement varying systems of government to determine how many policies of each type can be implemented.

Just as you can set your own agenda, each of the leaders in the game have their own, as informed by history. As a player, this means certain perks that will encourage a particular style of play, and the CPU will largely follow the same style. For example, Queen Victoria will look upon you dimly if you're deemed as a rival to her colonial ambitions, which means that you might curtail expansion if you don't wish to displease her. Each leader also has a secondary agenda determined at random, in order to make sure that the game doesn't become overly predictable. Diplomatic exchanges with the leaders are a presentational highlight of the game – it never looks

anything less than nice, but there's a definite sense of character conveyed by the animation and voice acting that transcends what's going on elsewhere.

In multiplayer, this adds up to a brilliant game – and single-player is no different, with one exception. The AI can be erratic, as competing players are prone to making some bizarre choices. While that might seem like a realistic thing for a civilization to do given current events, in practice it means that AI players will sometimes decide that war is the answer without having figured out what the question is, even if the result is an futile charge against a superior military. These decisions happen infrequently enough that you'll be able to play to your rivals' likes and dislikes consistently, but often enough that they're noticeable and quite jarring. The developers have worked at making sure games don't become too predictable and that effort is appreciated, but this approach doesn't quite feel right either.

Still, this is the best 4X game on the market right now. The pace of play ensures that you'll always want to stick around for one more go, and it manages to walk a fine line to offer both strategic depth and accessibility for newcomers. If you're a strategy fan, you can choose to have free time or *Civilization VI* – it's not possible to have both. ✱

In a nutshell

An exceptionally good strategy game that manages to make a complex genre appealing. AI inconsistencies are a bugbear, but if you're a multiplayer fanatic you can bump the score up by a point.

8 RetroGamer_Mag scored **8** for Sid Meier's Civilization VI

Follow our scores on JUST A SCORE

✱WHY NOT TRY

▼ SOMETHING OLD

CIVILIZATION (PC)

▼ SOMETHING NEW

AGE OF WONDERS III (PC)

[PC] The new Civics options are a welcome way to try to make cultural victories viable.

RETRO ROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

Battlezone

» **System:** PSVR » **Buy it for:** £49.99
» **Buy it from:** PSN, Online, Retail

This is everything we want from a modern update of *Battlezone*. It not only spices up the gameplay for a new generation of gamers, but also captures the visuals of the original game and upgrades them accordingly – using VR, no less. *Battlezone* requires you to traverse a number of game boards, completing various missions in an attempt to beat your ever-expanding opponent. The shooting mechanics are excellent, with a range of great weapons to pick up, while movement is fast and fluid. The VR is also solid, although it's not as much of a showcase as similar games. While its difficulty can be certainly savage, *Battlezone* remains a great, but simple VR arcade blaster.

RetroGamer_Mag scored **7** for Battlezone

Follow our scores on JUSTASCORE

Dragon Quest Builders

» **System:** PS4, Vita » **Buy it for:** £49.99
» **Buy it from:** PSN, Online, Retail

Some of us can't just open a box of Lego and just build a masterpiece. Sometimes we need blueprints, sometimes we just want to be told how to build the Millennium Falcon. You can face the same problem when paying *Minecraft* and this is where *Dragon Quest Builders* rushes to your aid, with the Mojang playbook in one hand and a hefty list of instructions in the other. It works, too. *DQB* brings many thoughtful quality-of-life changes to the *Minecraft* formula while offering a questing framework which does a grand job in educating you in how to become a master builder. We've never asked for a *Dragon Quest*/*Minecraft* mashup, but we're glad we have one.

RetroGamer_Mag scored **8** for Dragon Quest Builders

Follow our scores on JUSTASCORE

Super Stardust Ultra VR

» **System:** PSVR » **Buy it for:** £14.99
» **Buy it from:** PSN, Online, Retail

Lazy is the best way to sum up the latest release from Housemarque. This is to all intents and purposes the same *Super Stardust Ultra* that was released in 2015, with a new mode bolted on and some fancy VR visuals. While there's no denying that seeing the worlds floating in front of you is impressive, the effect wears thin, leaving you with an undeniably slick shooter that gains absolutely nothing from being in a new medium. Things pick up a little with the addition of the new VR mode, Invasion, which puts you into a *Battlezone*-styled battle on the planet's surface, but it lacks the punch of the core game and defeating the endless waves of enemies soon gets boring.

RetroGamer_Mag scored **6** for Super Stardust Ultra VR

Follow our scores on JUSTASCORE

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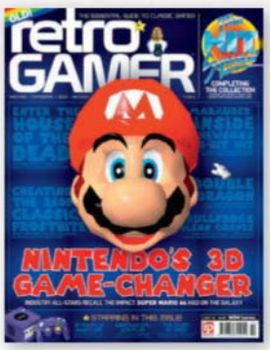

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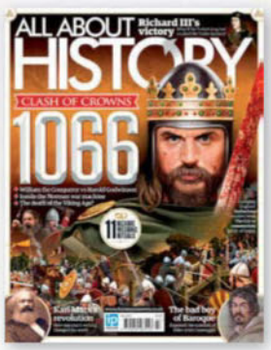

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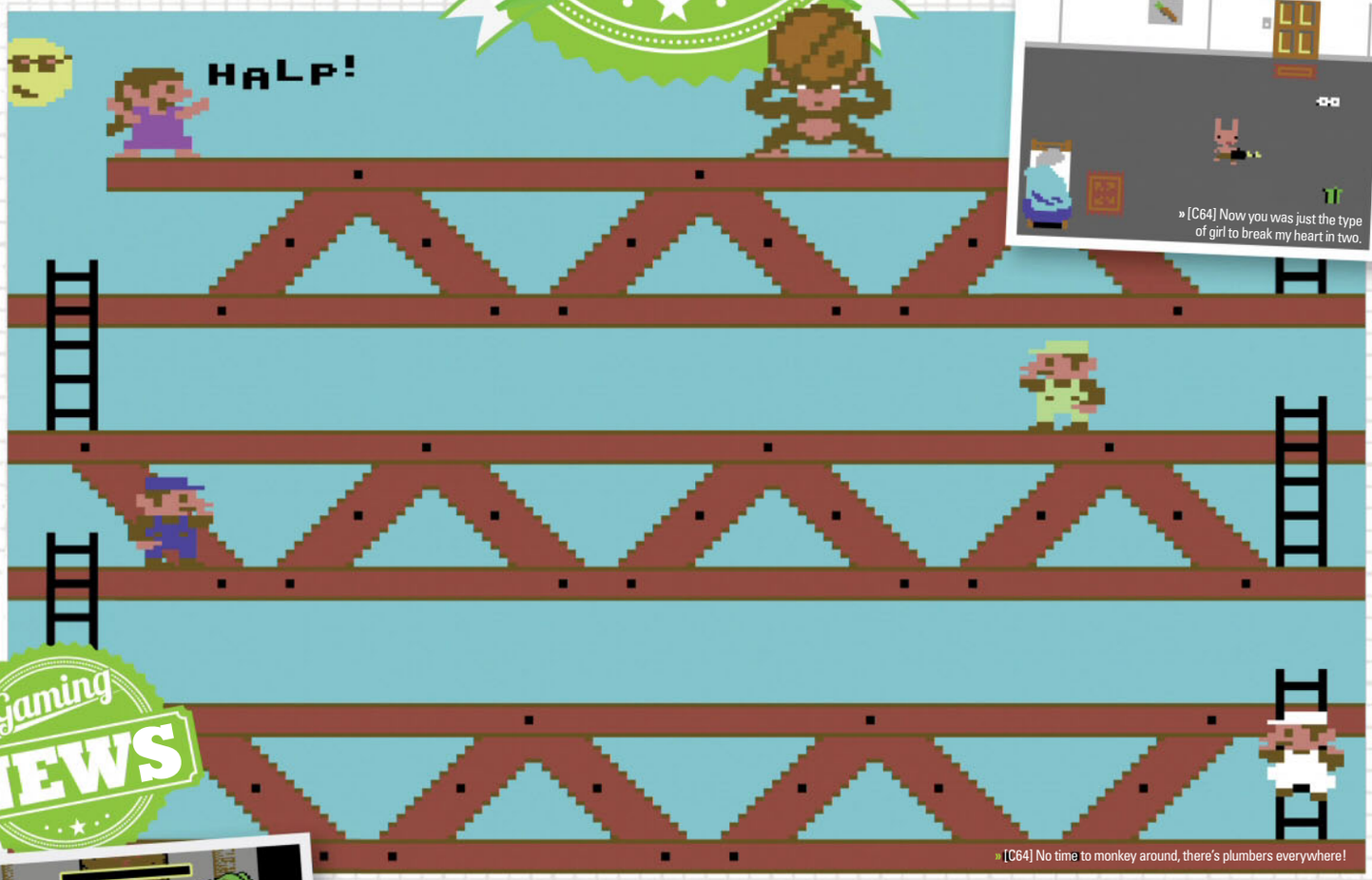
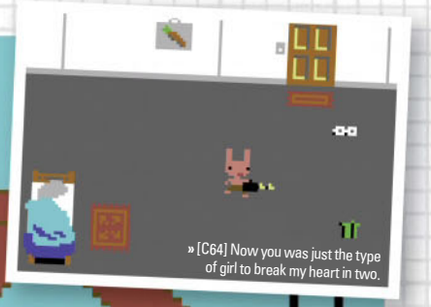
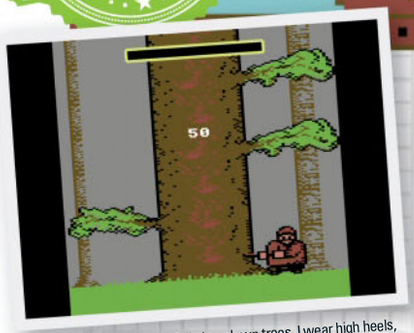


» [C64] No time to monkey around, there's plumbers everywhere!



» [C64] Now you was just the type of girl to break my heart in two.

Gaming NEWS



» [C64] "I chop down trees, I wear high heels, suspenders and a bra."

IN SMALL PACKAGES

The 2016 C64 4K Game Coding Competition had the slightly nebulous theme of 'craptastic' and a size limit of just 4K, but otherwise left the developers to decide on the implementation. This led to over 20 games being released and, as is usually the case with competitions like this, they're quite a mixed bag. There are a couple of puzzle-based games with our favourite probably being the simple, but playable, rendition of *Picross* from Oziphantom where number clues are used to create a pixel-based image on the screen, but the action titles are where this competition has fared best.

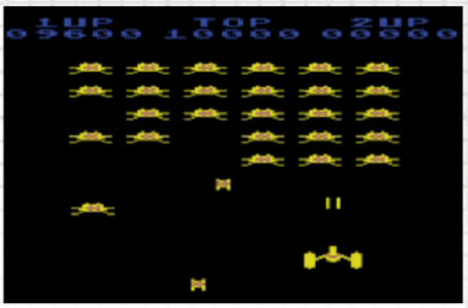
For example, *Lumberjack* is a rendition of a recent casual game where the titular tree feller hacks massive lumps away from the trunk of a mighty Scots pine while constantly changing sides to avoid being bludgeoned by branches. Both *Zombie Massacre* and *Attack Of The Mutant Cabbages* see the player under siege, although from very different adversaries which need to be blasted to pieces, or *Rise And Shine Professor Miggles* stars an oversleeping rabbit who must race against the clock in order to get to work on time and earn a score bonus by lying in just a little after his alarm goes off. There are some very nice platform-based titles, too: *Goblin* is a remarkably cute little affair where treasure-laden platforms are guarded by creatures, while *Granny's Teeth* works on a different scale, with the prized artefact a mere two flights of stairs and a couple of patrolling enemies away from a Zimmer frame-wielding old woman.

One developer in particular produced several entries of note, along with the aforementioned titles, Goblin Pond Software contributed a reaction test called *Winky Blinky* and the scatological *Dog* – literally a crap game where the objective is to leave 'presents' around the garden without getting caught – but, along with the simple but well presented downhill racing of *Super Ski,* the title that really caught our attention from them was *Bonkey Kong* since it's a retelling of the very similarly-titled coin-op, except with the player taking control of the villain, lobbing barrels down at a horde of advancing plumbers.

All of the entries can be found over at the C64 Scene Database behind Kikstart.eu/reset4k-2016-c64 including a convenient download link with everything in one place, or alternatively there's you can head on over to Kikstart.eu/reset4k-2016-c64-crt which has all of the games compiled into a single cartridge image for faster loading.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **darran.jones@futurenet.com**



» [Master System] A new platform for an old game.

HAWKS FROM SPACE

Developer KanedaFr has a soft spot for the game *Space Hawks* on the Amstrad CPC and that was a good enough reason for him to convert it to the Sega Master System!

The game is a fairly simple gallery shooter, inspired by coin-ops like *Galaxian* and sports what appear to be straight conversions of the less than stellar graphics from Amsoft and Durell's original game.

Kikstart.eu/spacehawks-sms goes to a thread at SMS Power's forums with a few notes from the developer, a link to the source code and a download.

"The game is a simple gallery shooter, inspired by coin-ops like Galaxian"

» [ZX Spectrum] Cellophane flowers of yellow and green.

DRIFT PAST THE FLOWERS

Mysterious Dimensions is a colourful platform game for the 128K Spectrum with a simple goal of collecting all the diamonds. There are over 40 screens with four graphical themes to work through and a few moments were *Jet Set Willy*-style precise timing is required to succeed.

In the World Of Spectrum forum thread behind Kikstart.eu/dimensions-spec where the download can be found, the game's author Yerzmyey – who also composed the excellent in-game music – commented that he wanted to make an easier game but there are still some challenging screens.

HOMEBREW HEROES

Steve Broad likes Horace and has developed a few games based around him which can be found at his website stevebroad.co.uk - we talked about his latest, Merry Christmas From Horace

THE BIG INTERVIEW STEVE BROAD

» [ZX Spectrum] Don't forget to add Horace to your card list.

So we know Horace went skiing... but why a Christmas game?

In 2015 I started writing an unreleased game by *Manic Miner* creator Matthew Smith called *Megatree*. I did a lot of research for this game and I managed to get the first screen done with the Cossack dancers. But I went a bit off-track and wanted to mess around with animated pixels. I created my own snow routine and placed a Horace graphic in front of it to see what it looked like. I ended up putting *Megatree* to one side and continued with writing another *Horace* game. This is a new scenario for Horace but he still has his old enemies. The game had Horace walking around and there was snow falling on some levels. Let's add some enemies from previous *Horace* games and some graphics of things falling from above. I thought I could write this in a few weeks with the intention to release it in December 2015. How wrong was I! The game just grew with more ideas being added on a daily basis. With the additional input from my wife and daughter with even more ideas, I felt obliged to add them. So basically, Santa has had an accident and dropped his presents and its Horace's job to collect them.

Where does all of this love for Horace come from?

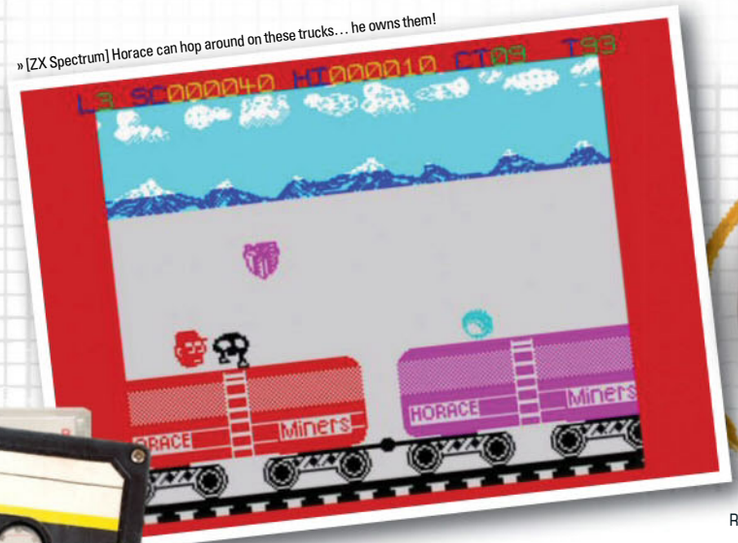
Hungry Horace was the first game I played on the Spectrum. I liked the simple idea and simple gameplay. I liked it so much that I created my own *Horace*-type character called 'Frankie' and created a *Hunchback*-type game called *Frankie The Rescuer*. It was really bad and completely written in BASIC, but I'll be including it in the Horace Christmas package as an Easter Egg. I have also created a Microdrive based compilation of the previous *Horace* games I wrote, *My Rendition Of Horace To The Rescue, Horace To The Rescue 2, Horace Miner* and *Horace Miner 2*. This compilation is aptly-called *A Christmas Present From Horace*.

How long did this outing take to finish?

I started writing *Merry Christmas From Horace* in October 2015. There was no design on paper, I just wanted to create a game with a scrolling landscape with a moving train. The train became other things in later levels such as houses and icy levels. Lots of snow is also added on some levels. I found a Christmas drawing that I did in 1983 on a real Spectrum and a portable television. I added Horace and the title and that has become the loading screen. I have gone to town with the artwork including a poster of an advert and a cassette inlay based on the original *Horace* games.

Is there anything you'd do differently?

I wanted to add in-game music, but it made everything too slow to play so I had to take it out. So if I did another *Horace* Christmas game I would try for the 128K Spectrum with better sound capabilities



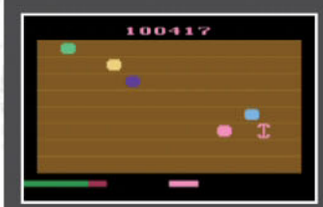
» [ZX Spectrum] Horace can hop around on these trucks... he owns them!

DO YOU REMEMBER?

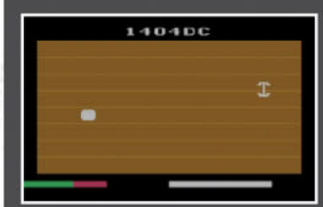
Ultra SCSIcide for the Atari 2600 is a simulation in the very loose sense that Eighties games tended to use the term. The player is handed control of the read/write head in a SCSI hard disk and tasked with reading bits of data as they go past.

Each bit is colour coded and the head changes colour to match the one currently being sought, but the transfer rate on each platter is higher than the previous one and, if the head doesn't fetch a bit quickly enough, the game will end due to a buffer underflow.

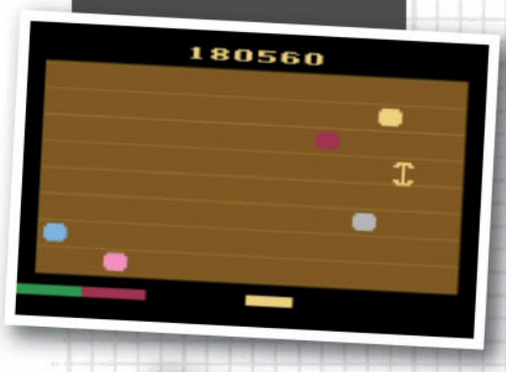
Head to Kikstart.eu/scsi-2600 for developer Joe Grand's website where the game can be transferred to your hard disk or follow the link from there to Atari Age's store where a ROM-based version can be purchased.

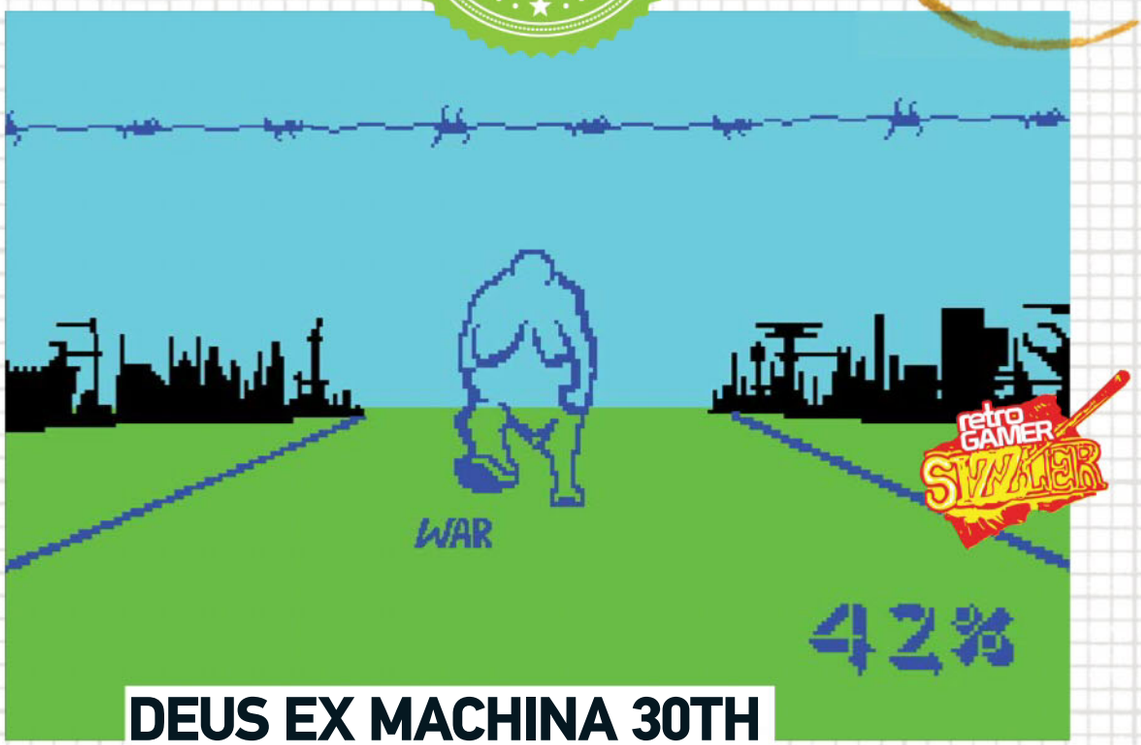


» [Atari 2600] Defragging has never been so intense.



» [Atari 2600] Worth even less than a haircut.





DEUS EX MACHINA 30TH ANNIVERSARY COLLECTOR'S EDITION

» **FORMAT:** PC (VIA STEAM) » **DEVELOPER:** AUTOMATA SOURCE » **DOWNLOAD:** KIKSTART.EU/DEUS-STEAM » **PRICE:** £3.99

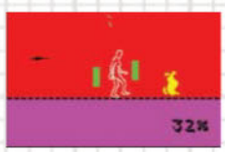
When the last mouse on Earth dies within the inner workings of the Machine, she sees its final excretion as an opportunity to create a person and experience the world through its senses. The result is the Defect, a being with wondrous powers who, despite the Machine's best attempts to conceal him, soon comes to the attention of the sinister Defect Police.

The life of the Machine's creation from before birth to death passes each time the game is played, beginning with manipulating the mouse dropping with a DNA welder and finding a human egg to use right through to when he finally gets to 'clock off'. During this journey the player either controls the Defect directly or is charged with protecting it. It isn't possible to die prematurely because this particular life is predetermined, but progress is recorded in the form of a percentage score and the game's final act concludes with a table showing where that stood at key points.

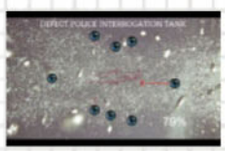
This story plays out both on the screen and in the form of an audio track – the original came with a second cassette which had to be synchronised with an on-screen timer – which, along with creator Mel Croucher, boasts the vocal talents of Donna Bailey, Ian Dury and Jon Pertwee. The result was something unique for the Eighties because story-driven games were pretty much unheard of at that point but, although the genre is commonplace today, this stands out it doesn't take itself seriously. Yes there are a few serious messages, but they're combined with a lot of wit and Ian Dury as a singing sperm!

Deus Ex Machina originally garnered excellent reviews but wasn't widely distributed, so hopefully this version and will get it some much deserved exposure. We found the remixed visuals to sometimes be indistinct, but the Spectrum graphics are also available and either option fits together neatly with the remastered soundtrack.

» [PC] I think I miss my mummy, but I don't remember who she was.



» [PC] Seeking high score even in the laser's mouth.



» [PC] It don't not got a number tattooed upon its baldy head.

RetroGamer_Mag scored **9** for Deus Ex Machina 30th Anniversary Collector's Edition

Follow our scores on JUST A SCORE

Don't forget to follow us online for all the latest retro updates

RetroGamerUK @RetroGamer_Mag darran.jones@futurenet.com

GENIUS INTO THE TOY WAREHOUSES

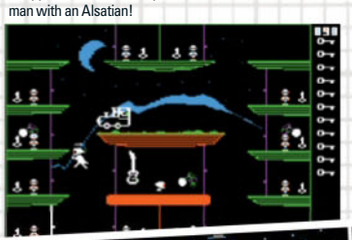
» **FORMAT:** APPLE II » **PRICE:** FREE
» **DEVELOPER:** LIVEARCADE
» **DOWNLOAD:** KIKSTART.EU/GENIUS-1-A2

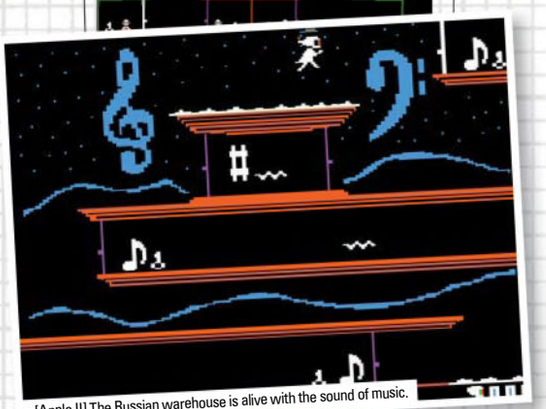
Genius Into The Toy Warehouses is based on programmer Daniele Liverani's three-part rock opera – have a look at geniusrockopera.com for more information – and takes place in an alternate reality where people's dreams are broadcast to them by the Dream League. Genius is a boy who accidentally ends up in their realm amongst the props used for making dreams and, because the prince of the European Dream League has been falsely blamed for his incursion, our hero heads out to save him.

Each stage of the game is a warehouse where keys must be collected to open doors until the target item is reached; not getting there before the timer expires or touching one of the roaming nasties will take away one of Genius' lives but there are bonus items which unlock all the doors, blow up all of the smaller enemies or dish out precious seconds for the timer.

8 RetroGamer_Mag scored **8** for Genius Into The Toy Warehouses
Follow our scores on JUST A SCORE

» [Apple II] Better security than a uniformed man with an Alsatian!





» [Apple II] The Russian warehouse is alive with the sound of music.

VILQ

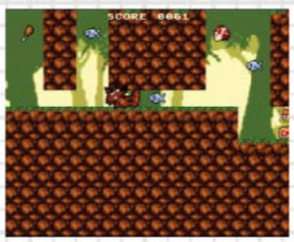
» **FORMAT:** MEGA DRIVE » **DOWNLOAD:** KIKSTART.EU/VILQ-MD
» **DEVELOPER:** TEHKAIN, AXI0MAT AND ACEMAN » **PRICE:** FREE

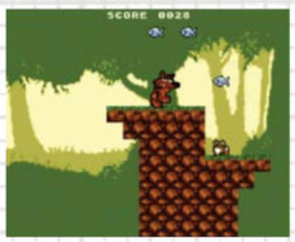
It's feeding time, and for *VilQ* that means running through some rather perilous landscapes while leaping over or ducking under hazards and grabbing tasty morsels out of the air. The obstacles are made up of the local wildlife – both found on the ground and in the air – or the landscape itself which is scrolling at a fixed speed so getting caught at the far left side of the screen proves fatal.

This does look and sound nice, but there are some significant issues with the gameplay, in particular with the player to enemy collision detection which is annoyingly sensitive; on a slower paced game that would be easier to work around, but *VilQ* is rather manic and only having one life makes things more difficult still. It's still playable, but could have been far better with some tweaks so what's there proves more frustrating than anything else in the long term.

6 RetroGamer_Mag scored **6** for VilQ
Follow our scores on JUST A SCORE

» [Mega Drive] It looks like flying fish are on the menu today.





ROUNDUP

The name *Pac_Man Eat N Run* sums things up the game quite nicely, it's an Atari 2600 game where Pac must consume fruit and stay clear of the ghosts! It's still a work in progress and the Atari Age forum thread hidden behind Kikstart.eu/pac-enr-2600 has an ongoing discussion about features and bug fixes along with playable versions of the game to gobble up.

Over on the Amiga we have *Blazing Guns* which is a platform-based action game that's in a fairly early stage of development at the moment but is already sporting some gorgeous graphics. Have a look behind Kikstart.eu/blazing-guns-amiga for more information along with an embedded YouTube video and the playable demo to download – there's not a lot of gameplay to see just yet, but this is one to watch for the future.

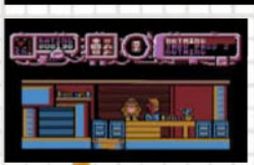
SPYCAT

» **FORMAT:** ATARI 8-BIT » **DEVELOPER:** FANDAL AND MIKER » **DOWNLOAD:** KIKSTART.EU/SPYCAT-A8 » **PRICE:** FREE

Spycat for the Atari 8-bit is a conversion from the BBC Micro and the plot was a parody of then current events surrounding former MI5 operative Peter Wright and his scandalous autobiography *Spycatcher*. So enter MI4-and-a-half agent Peter Correct, the titular spy cat close to retirement and looking to bolster his meagre pension by gathering some dirt to dish out after he legs it to Greenland to write his memoirs.

The secret services aren't exactly the easiest place to steal from of course and there's a lot of ground to cover which is being protected by agents, CCTV cameras and lethal security devices, so Peter will need to do quite a bit of work and deal with some familiar faces before scarpering abroad. The inventory system is a little clunky – a fault of the original – but the gameplay still holds up well despite the humour being out of date now.

8 RetroGamer_Mag scored **8** for Spycat
Follow our scores on JUST A SCORE



» [Atari 8-bit] Paying a quick visit to Sir Clive Amstrad over at Q branch.

» [Atari 8-bit] Don't stand still because it leads to an unexpected declassification!

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!
Every month, one lucky writer-in will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one
retro GAMER

STAR LETTER

THE FUTURE'S BRIGHT

Hi **RG**,
So then, Imagine Publishing has been bought by Future and I'm presuming that you're all cosy with your new colleagues by now. I've seen people online worrying about the magazine, but I'm not concerned. There's only one thing on my mind – how will you be using the new resources at your disposal?

Future's back catalogue has a huge number of games magazines, such as *Edge*, *Computer & Video Games*, *Arcade*, *Super Play*, *Sega Power*, *PC Zone*, *Amiga Power* and, of course, *Amstrad Action*. That's a big chunk of gaming history! There must be all kinds of old interviews and features in those mags, not to mention many thousands of reviews. Do you have access to these magazines now? If so, will we start to see some of these old reviews popping up in the magazine every now and then? Likewise, Future still owns the *GamesMaster* brand – could we see old episodes popping up on the **Retro Gamer** YouTube channel?

I think this is an exciting time for **Retro Gamer**, and I want to see what you can achieve under the new ownership.
Frankie Casbon

Yes, the deal has gone through, which means great things for the magazine going forward. Rest assured that we'll be working with our new colleagues on *Edge*, *GamesMaster* and the like to see what archive content they've got, as well as delving through classic magazines such as *Amstrad Action*, *Amiga Power* and *Super Play* for key interviews. You're right to suggest that there are exciting times ahead – the team hasn't changed and we have gained access to new people and new resources, so we're all feeling pretty good about the future right now. 2016 has been Retro Gamer's strongest year yet, and it's only going to get better.

DISCUSSED THIS MONTH

PlayStation VR
We've all tried it, and to be honest we're impressed – it's a great piece of kit. So far, though, only one of us has been £350 worth of impressed, and that's (predictably) Darran. If you haven't seen him try VR, you really must take a look at our preview for issue 160 on YouTube.

BEYOND THE ULTRA NINJA

Dear **Retro Team**,
Great article on Beyond Games in issue 160; landed on it when I was doing my customary 'flick through and pick the first article that catches your eye' (it's basically an awful shuffle of the pages of your mag).

Anyway on page 67 there is a screen shot of the character Volcana from *Ultra Vortek* in action. The shot is from *Ultra Vortek*, yes, but there are also two characters from the much-maligned Atari Jaguar scrapper *Kasumi Ninja* present (the demon Gyaku end boss, and the Native American character Pakawa, I believe).

Can I ask why that is, as in the article I couldn't find a reference to any developer or software title crossover/relationship? Is it a screen grab error or is there a interesting nugget of trivia that we're missing?

Whatever the case, please let us know. Also, I would absolutely love a feature on *Kasumi Ninja* itself, and its cult status amongst the gory fighters of the nineties. I would have thought a very interesting development history and reception coverage existed for the title.

I'd also put money on your future article having a breakout column on its dubious merits as part of the *GamesMaster* gore special… but that's a punt; just a feature would be pretty great.
John Roy

We looked at this and it wasn't, in fact, a shot from *Ultra Vortek* or *Kasumi Ninja*. It turns out that it was a shot from the customisable fighting game engine *Mugen*, which explains the crossover – this is the fighting engine that allows for Homer Simpson versus Ryu, after all. As punishment, the offending writer has been made to play the PS2 version of *Shadow The Hedgehog* until he sees all 11 endings. As for *Kasumi Ninja*, we'll see what we can do.

» [Jaguar] Here's a real screenshot of *Ultra Vortek*, with no interlopers from *Kasumi Ninja*.

LOCKED TROPHY CABINET

Dear Sir,
To say that I am ever so slightly miffed with EA Games at the moment is an understatement!

I recently purchased a preowned copy of *Bulletstorm* for the PS3 at my local Game store, only to find that the online option was unavailable. Not only did it require a code (which, obviously, was unusable since the game had been owned by a previous user), I have since heard that EA has taken down the servers for this title anyway.

This means that some of the Trophies (including the all-important platinum) cannot be achieved through no fault of my own. Perhaps it is time for the online trophies not to count towards that platinum, and only be gained as a bonus for players who wish to play multiplayer games?!
D O'Conner

» [PS3] There's a remaster of *Bulletstorm* on the way – maybe you can grab the Trophies on that?

CONTACT US

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33 Richmond Hill, Bournemouth,
Dorset, BH2 6EZ

Email: darran.jones@futurenet.com

It's certainly frustrating to find that you'll never get 100 per cent completion of a game simply because you hopped on board a bit too late, and it suggests that developers are planning for the short term. Sadly, this will happen more often as more games with online components become retro. Right now people are doing great work in reviving Dreamcast servers – hopefully these user efforts will become the norm.

UNCHARTED PIXELS

Hi there **RG**,

A friend and I spent much of the weekend playing *Capcom Classics Collection Volume 2* on PS2, including the arcade games *Knights Of The Round* and *King Of Dragons*. Having infinite lives – rather than shallow pockets – made it a very different experience. For example, we could spam the energy-draining 'desperation' moves without fear. But the main thing was that it allowed us to experience the whole game. This made me think of how many unplayed levels there must be across many arcade games, and indeed certain 8-bit and 16-bit games based around limited credits. Everyone sees the first few levels, but what proportion had the requisite skill or money to make it through to the last? I like to think that some games have final levels that no one has seen!

My own example of this is the exclusive final level added to the Mega Drive version of *Snake Rattle 'N' Roll*. The game was hard enough as it was, and with most people playing it on the NES, I imagine only a handful of players worldwide have played the extra Mega Drive level.

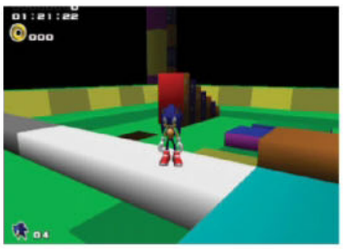
To be fair it's a bit different these days what with the likes of YouTube, speed runs, arcade compilations and the like but I bet there are still some lesser-known games out there with unplayed levels.

Do you have any examples of your own endeavours?

Tim Fitches

The exclusive hidden stage of *R-Type* for the Master System immediately comes to mind, but that was pretty well-documented. In fact, thanks to people who delve through code to bring us tasty cheats, we're inclined to believe that there's very little unexplored territory in games. After all, even hidden test stages and half-finished stages can be dragged out of games – but maybe that's a subject worth talking about too…

» [Dreamcast] *Planet Ring* has returned to online play thanks to the efforts of technically-gifted fans.



» [GameCube] Uncharted territory is rare in games, but this test stage in *Sonic Adventure 2 Battle* is rarely visited.

From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Your retro gaming bugbears

ianpmarks
The cost. 15 years ago my Vectrex cost me £2 from a jumble sale, my Apple Mac 128K £10 from a local paper ad, and my boxed ColecoVision £1 from the local tip. Nowadays I'd need a loan to buy them.

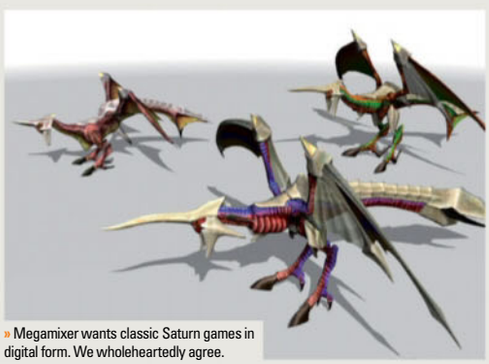
ncf1
For me it's the fact that emulation is a double-edged sword: on the one hand you have, at your disposal, a library of games to play at any time, often almost perfectly well, but on the other it totally takes away the necessity and charm of having the original computer and its peripherals to fully appreciate the experience.

joefish
Companies like Codemasters that refuse to let 30-year old games be available for free download and emulation – when many other companies do. And Nintendo going after emulators and fan-remakes of its old games.

theantmeister
I'm in a constant state of worry about the batteries in my SNES carts exploding.

Eric
Anyone who plays retro games in the wrong aspect ratio!

Nikolai
Being a poor student, definitely the poor use of the Virtual Console by Nintendo lately. What a wasted opportunity! It could be such a better service.



» Megamixer wants classic Saturn games in digital form. We wholeheartedly agree.

Megamixer
Sega Saturn conversions to modern digital services still not being a 'thing'. I would pay good money to download stuff like *Panzer Dragoon Saga*, *Burning Rangers* and *Fighters Megamix* on PSN but it remains a mere fantasy.

kiwimike
The lack of a really decent, iTunes-style store for all gaming. Until this happens it remains a bit messy and legally suspect to get all the games you'd want under one system.

ArchaicKoala
Lightguns! I'd love to be able to play *Time Crisis* on my new TV but it is impossible. I'd love a magic box that would allow lightguns to work on a modern TV.

retro GAMER

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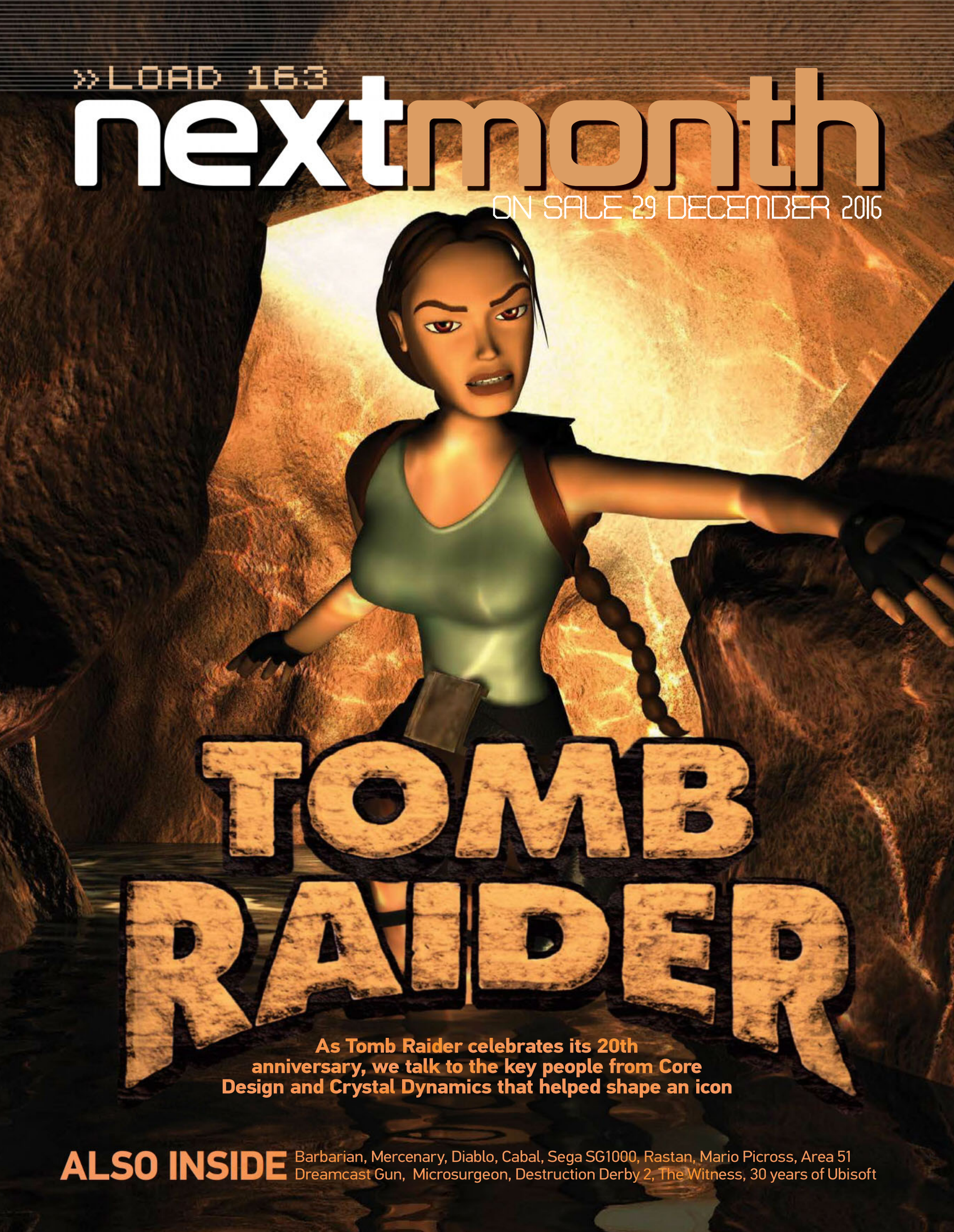
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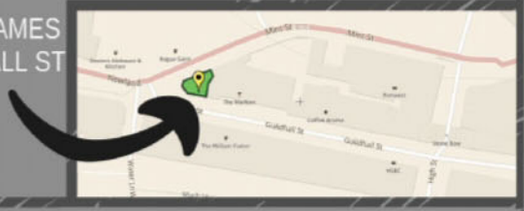

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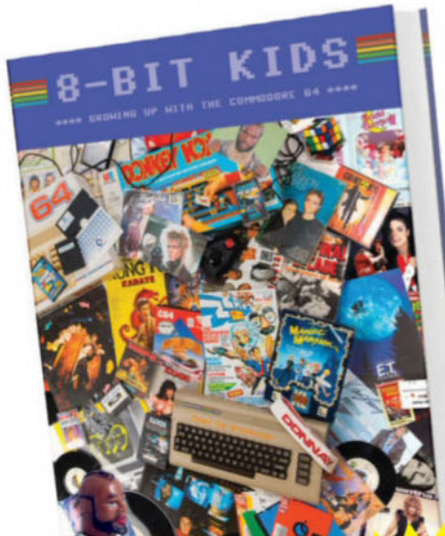

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ENDGAME

HOME ALONE

» Home Alone is one of the greatest Christmas movies of all time, in large part because it represents the values of the season so well. Greed, violence, family discord... Hang on, is that right? In any case, Kevin McCallister has managed to fend off the bungling burglary of Harry and Marv, and endured a final boss fight that we're assured was definitely in the film. Let's see what happens next...

01

» You sure did show that furnace who was boss, Kevin. Only, you've gone and blown it up rather than just telling it to shut up like in the film. Don't you see the snow, Kevin? Now you're going to freeze to death.

02

» Luckily, Kevin's parents have shown up to save him from his own stupidity before it can progress any further. We'll address the legal matter of their criminal negligence later – for now, it's time to enjoy a heartwarming family reunion.

03

» Kevin's mother asks the only sensible question possible in this scenario. Kevin decides against telling them that he near single-handedly fended off two dangerous adults, and also neglects to mention how he deliberately broke the furnace.

04

» However, our juvenile protagonist isn't lying when he says that it was nothing he couldn't handle. In fact, his talent for creating incredibly hazardous environments has brought him to the attention of TV production companies in Japan, who believe he may be the next great game show producer.

05

» Finally, we get to see the Wet Bandits in jail, before their experiences inside transform them into the Sticky Bandits. These people are, quite frankly, mugs of the highest order for failing to outsmart an eight-year-old child. Good luck suing the McCallisters for your injuries, you stupid idiots.

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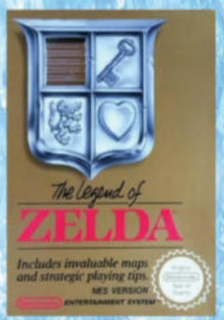

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